#### 2015-1336

# United States Court of Appeals for the Federal Circuit

STEVE MORSA,

Plaintiff—Appellant,

ν.

FACEBOOK INC.,

Defendant—Appellee.

Appeal from the United States District Court for the Central District of California in Case No. 8:14-cv-00161-JLS-JPR, Judge Josephine L. Staton

#### PLAINTIFF-APPELLANT'S PRINCIPAL BRIEF

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Dated: April 20, 2015

**CERTIFICATE OF INTEREST** 

Counsel for Plaintiff-Appellant Steve Morsa ("Morsa") certifies the

following:

1. The full name of every party or amicus curiae represented by me is:

Steve Morsa.

2. The name of the real party in interest (if the party named in the caption

is not the real party in interest) represented by me is: N/A.

3. All parent corporations and any publicly held companies that own 10

percent or more of the stock of the party or amicus curiae represented by me are:

None.

4. The names of all law firms and the partners or associates that appeared

for the party or amicus curiae now represented by me in the trial court or agency or

are expected to appear in this court are:

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Dated: April 20, 2015 Counsel for Plaintiff-Appellant

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# STATEMENT OF RELATED CASES

No appeal in or from the same civil action or proceeding in the lower court or body was previously before this or any other appellate court. There is no case in this Court that will directly affect or be directly affected by this Court's decision in the pending appeal.

## **STATEMENT OF JURISDICTION**

The district court had jurisdiction over this patent infringement case under 28 U.S.C. §§ 1331 and 1338. The district court entered a final judgment on January 5, 2015. A16. The final judgment appealed from is an order disposing all of the parties' claims.

After receiving an extension of time to file a notice of appeal, Morsa timely filed his Notice of Appeal to the Court of Appeals for the Federal Circuit on February 13, 2015. A1203, A1204. This Court has jurisdiction over this appeal pursuant to 28 U.S.C. § 1295(a)(1).

#### **STATEMENT OF THE ISSUES**

Whether the district court erred by dismissing, on a motion for judgment on the pleadings, Morsa's patent infringement action on the ground that all asserted claims of U.S. Patent Nos. 7,904,337 and 8,341,020 fail to claim patent-eligible subject matter under 35 U.S.C. § 101 where:

- i. The district court failed to consider whether each asserted *claim*, as opposed to the alleged *concept* to which the claim is drawn, is "an idea, having no particular concrete or tangible form" in accordance with *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014);
- Facebook introduced no evidence, let alone clear and convincing evidence, that the claims allegedly monopolize their alleged underlying abstract ideas; and
- iii. Morsa's factual allegations, accepted as true and with all inferences in his favor, showed that the elements of the asserted claims contain inventive concepts beyond mere abstract ideas.

#### **STATEMENT OF THE CASE**

This is a patent infringement case. On February 4, 2014, Morsa filed suit against Facebook Inc. ("Facebook") in the United States District Court for the Central District of California. A106.

Morsa accused Facebook of infringing U.S. Patent Nos. 7,904,337 (the "'337 patent") and 8,341,020 (the "'020 patent") (collectively, the "patents-in-suit"). A109–12. Facebook's infringing acts included its "making, using, selling, and/or importing, without license, infringing advertising platform(s), systems, and methods, including without limitation, the Facebook website and advertising platforms, including, but not limited to, Facebook Ads, Mobile Ads, and related advertising platforms, products, systems, and services related thereto." A111–12.

Morsa later asserted the following claims against Facebook: claims 12, 113, 118, 119, 127, 128, and 129 of the '337 patent and claims 1, 2, 3, 5, 11, 12, 13, 18, 22, 23, 25, 29, and 108 of the '020 patent (the "asserted claims").

Facebook filed its Motion for Judgment on the Pleadings of Invalidity (the "Motion") on November 13, 2014. A593. The Motion sought judgment on the pleadings because, according to Facebook, the patents-in-suit were invalid under 35 U.S.C. § 101 and failed to claim patentable subject matter under the Supreme Court's decision in *Alice Corp. v. CLS Bank International*, 573 U.S. \_\_\_\_\_, 134 S. Ct. 2347 (2014). A600. Morsa opposed the Motion on various grounds. A919.

The district court found in favor of Facebook and granted the Motion. A8–A15. The district court found all of the asserted claims added no inventive concept beyond certain abstract ideas. Thus, the district court concluded that the patents-insuit were invalid under 35 U.S.C. § 101 and dismissed Morsa's claims.

The district court's decision is reported at *Morsa v. Facebook, Inc.*, No. SACV 14-161-JLS (JPRx), 2014 WL 7641155 (C.D. Cal. Dec. 23, 2014). The district court entered Final Judgment on January 5, 2015. A16. This appeal followed.

#### **STATEMENT OF THE FACTS**

Morsa is a self-taught individual inventor who devoted his personal time and money to inventing and patenting a better way for advertisers to advertise their intended audiences. Although he is not an attorney, Morsa personally and successfully prosecuted his patents through the U.S. Patent and Trademark Office ("PTO") for years. Indeed, during prosecution, Morsa *overcame* rejections to the patents-in-suit based on § 101 because the inventions are directed at improvements of existing techniques for advertising on the Internet (and computer networks in general). A712, A731, A785–86. Thus, like all issued patents, the patents-in-suit carry a presumption of validity (a presumption largely disregarded by the district court). 35 U.S.C. § 282; *Microsoft Corp. v. i4i P'ship*, 564 U.S. \_\_\_\_\_, 131 S. Ct. 2238, 2252 (2011).

#### I. Overview of the Patented Technology

While the field of invention of the patents-in-suit "relates generally to the field of advertising, and in particular to the field of matching advertisers with entities via computer networks," A40, A82, the patents-in-suit, both titled "Match Engine Marketing," cover systems and methods that employ a novel software engine over a computer network to "match" advertiser offerings with product, service, and benefit-seeking entities and provide advertisement presentations that are customized for users and prioritized based on advertiser bids. A29, A70. The '020 patent is a

continuation of the '337 patent. A29, A70. Hence, the patents-in-suit share figures and a common specification. Compare A30–59, with A72–101. The patents-in-suit contain a total of 391 claims.

The patents-in-suit claim priority to a provisional application dated October 19, 2004. A29, A70. At that time, the prior art systems matched Internet advertisements with users based on the specific search criteria that users entered into a search engine. A40 (2:43–54). The prior art systems allowed advertisers to choose which search terms were relevant, and to place bids on specific search criteria, so that advertisers could influence the placement of their advertisements in the users' search results (e.g., higher bidders would have advertisements closer to the top of the page). A40–41 (2:55–3:29).

But there are a number of major drawbacks to these prior art systems, including, for example, (1) it is inherently difficult to predict a user's interests based on mere search terms; (2) the matching analysis cannot identify products, services, and benefits that do not relate to the specific search terms entered by the user, but in which the user might be interested; and (3) the systems do not account for geographic information and, thus, cannot match users with local advertisers. A41–42 (3:30–5:29). Further, such systems arbitrarily limit the number of advertisers who can

<sup>1</sup> For the sake of simplicity, the citations to the specification herein are to the '337 patent unless otherwise noted.

effectively obtain preferential placement—and therefore visibility of their advertising—based on each search term. A41 (4:1–28).

Recognizing the limitations of the prior art, Morsa invented a fundamentally different way of advertising over computer networks, where advertisers could specifically target their ads to a user based on that user's "multigraphics," as opposed to based merely on that user's search terms. A42 (6:34–38). Multigraphics include factors such as demographics (e.g., age, sex, marital status), geographic location (e.g., Alexandria, Virginia), and psychological interests (e.g., enjoys hockey). A42 (6:34–38). Further, Morsa's invention allows advertisers to influence the placement of advertisements by making bids in a continuous, competitive online bidding process. A42 (6:55-58). Facebook presented no evidence that before Morsa's invention, there has ever been "an entity demographic, geographic, psychographic criteria targeted pay-for-performance system which allows product, service, and benefit provider/advertiser/promoters to pay for the exposure of their offerings to their desired targeted entities/marketplace(s) in real or substantially real time via a computer network." A44 (9:46–52).

To accomplish this, the patents-in-suit disclose a "match engine." A42 (6:43–49). A match engine is a software program (or coordinated set of software programs) with related structure (database, interface, etc.) that can match in "real time" (or substantially real time) entities (individuals, business, governments, non-profit-

organizations, etc.) with products, services, and benefits based on the multigraphic criteria and/or characteristics unique to each entity.<sup>2</sup> A44 (10:20–26). The match engine can generate a "match result list" for advertisers based on a specified set of criteria. A42 (6:43–49).

The match engine web server (24) generates the match result list by comparing the users' answers to the criteria set by the advertisers. In a preferred embodiment, the match engine web server (24) will return a match if at least one of the criteria set by the advertisers "exactly matches" a user's answer. A50 (22:44–52). Alternatively, the match engine web server (24) can return a match based on "canonicalized" user and advertiser information, string matching algorithms, or using a thesaurus database. A50–51 (22:53–23:15).

The match result list includes advertisements obtained from and formatted by the results of a competitive bidding process conducted by an account management server (22). A46 (13:52–56). Through software on the account management server (22), advertisers may participate in the competitive bidding process. A46 (14:14–17). Using the software, the advertisers place bids on any number of criteria

<sup>&</sup>lt;sup>2</sup> A match engine is fundamentally different from a typical Internet search engine because its database consists of an orderly collection of set-format, easily-identified; easily-correlated; easily-manipulated product, service, benefit information from any number of "member" companies or firms. A44 (10:26–42).

<sup>&</sup>lt;sup>3</sup> Canonicalization removes common irregularities of criteria factors and terms used by advertisers and users. A50 (22:53–67).

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that are relevant to the advertisers' products. A46 (14:17–19). The higher bids receive more advantageous placement on the match result list generated by the match engine web server (24). A46 (14:31–34).

#### II. The Asserted Claims of the Patents-in-Suit

## A. The Asserted Claims of the '337 patent

Method claim 12 of the '337 patent states:

- 12. A method of generating an advertising presentation using at least in part a computer-compatible network, comprising:
  - maintaining a database including a plurality of advertisements, wherein each advertisement is associated with a provider and a modifiable bid amount that is independent of other component(s) of the advertisement, each advertisement being searchable;
  - identifying the advertisement(s) having demographic and/or psychographic and/or firmographic criteria which generate at least a partial match with an entity;
  - arranging the identified advertisement(s) into said advertising presentation at least in part in accordance with the values of the respective bid amounts for the identified advertisement(s).
- A59. This method claim 12 requires "a computer-compatible network" that includes (1) "a database" for storing "a plurality of advertisements," each advertisement being both associated with "a provider" and "a modifiable bid amount" and "searchable," and (2) a match engine used to "generate" matches between criteria of the advertisements and "an entity" and "arrange[]" those matches in accordance with bid amounts.

Method claim 113 requires similar elements, but covers the act of "presenting an advertisement." A64. Method claims 118 and 119, which depend from claim 113, additionally require "associating at least one negative/contradicting multigraphic and/or firmographic attribute with the advertisement," whereas claim 119 also adds the step of "identifying a match between the one or more negative/contradicting multigraphic and/or firmographic attributes and the received input" and "determining not to present the advertisement to the user based on the identified match between the negative/contradicting multigraphic and/or firmographic attributes or attributes." A64–65.

System claims 127, 128, and 129 of the '337 patent depend on claim 126, which states:

- 126. A system for presenting an advertisement, the system comprising processor electronics configured to perform operations comprising:
  - associating one or more multigraphic and/or firmographic attributes with an advertisement for which at least one bid has been received:
  - receiving input from a user via a device, wherein the received input comprises one or more multigraphic and/or firmographic attributes;
  - identifying a match between the multigraphic and/or firmographic attribute or attributes associated with the advertisement and the received input; and

presenting the advertisement to the user.

A65. This system claim 126 requires "processor electronics" that can "associat[e]"

attributes with advertisements that have at least one bid, "receiv[e]" attributes from users, "identify[]" matches between the attributes of the advertisements and the users, and "present[]" the advertisement to the user.

System claims 127, 128, and 129 place additional limitations on the "processor electronics" of system claim 126:

- System claim 127 requires that the processor electronics present advertisements "in conjunction with search results and/or additional content." *Id*.
- System claim 128 requires that the processor electronics determine "a presentation order and/or size and/or location of the advertisement based at least in part on at least one factor comprising the bid, a click-through rate of the advertisement, and an estimated or actual conversion rate of the advertisement." *Id*.
- System claim 129 requires that the processor electronics "associate" "negative/contradictory" attributes with the advertisement; "identify" matches between the negative/contradictory attributes; and "determine" not to present the advertisement to the user with a match those negative/contradictory attributes. *Id*.

#### B. The Asserted Claims of the '020 patent

Claim 1 of the '020 patent states:

# 1. A method comprising:

receiving through a network from a first device connected to the network information associating one or more demographic and/or psychographic and/or firmographic criteria with an ad;

receiving through the network from the first device or a second device connected to the network a bid associated with the criteria;

determining, by at least one processor, ad placement based

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at least in part on (i) the bid and (ii) ad performance and/or ad popularity.

A101. This method claim 1 requires "a network" connecting "a first device" to "a second device" and "at least one processor." The first device must transmit over the network information associated with ad "criteria," and the first and second devices must be capable of transmitting over the network "a bid" associated with the criteria. The processor must be capable of receiving that information and determining the placement of an ad based on the bid, "ad performance," and "ad popularity."

Method claims 2, 3, 5, 11, 12, 13, 18, 25, and 29 of the '020 patent depend from claim 1:

- Method claim 2 requires additionally that "ad performance and/or ad popularity" are capable of taking into account "actual popularity, projected popularity, click through rate (CTR), frequency of ads clicked on, number/choices of ads clicked on, time spent reviewing, and number/types of ads displayed." *Id*.
- Method claim 3 adds that the "processor" be capable of determining "ad placement" based "on the geographic location of an entity relative to one or more advertisers." *Id.*
- Method claim 5 requires the additional step of "displaying a bid amount that would improve ad placement." *Id*.
- Method claim 11 covers the additional step of using weighted "ad placement factors." *Id*.
- Method claim 12 adds the additional step of "delivering the ad to a wireless device." *Id*.
- Method claim 13 requires that the "ad" be "a video and/or audio ad." *Id*.

• Method claim 18 covers the additional step of "tracking activity and/or tracking performance." *Id*.

- Method claim 25 adds the additional step of "enabling or setting one or more advertiser notifications." *Id*.
- Method claim 29 requires the additional step of "displaying the ad only during a certain time of day." *Id*.

Method claims 22 and 23 of the '020 patent depend on method claims 20 or 21, which in turn also depend from method claim 1. Method claims 20 and 21 require the additional step of "displaying the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which [exactly matches / does not exactly match] the demographic and/or psychographic and/or firmographic criteria associated with said ad." *Id.* Method claim 22 requires that the entity "criteria" is "sourced from one or more of the group consisting of: a questionnaire, survey, profile, query box/field, and criteria query page." *Id.* Method claim 23 adds the additional step of "storing one or more entity criteria." *Id.* 

Method claim 108 of the '020 patent depends on method claims 98 or 99, which in turn, depend from method claim 97, which states:

# 97. A method comprising:

auctioning or bidding on or for, through a network via at least one device connected to the network, a(n): ad, entity, user, seeker, or entity criteria;

determining, by at least one processor, ad placement;

wherein one or more demographic and/or psychographic and/or firmographic criteria is associated with, a component of, a factor applicable to, or which

corresponds to said ad, entity, user, seeker, or entity criteria.

A104. This method claim 97 requires "a network" connecting "at least one device" to "at least one processor," upon which advertisers "auction[]" or "bid[]" on "ad, entity, user, seeker, or criteria." The processor must be capable of "determining" "ad placement," and the "ad, entity, user, seeker, or entity criteria" must be associated with, include, or relate to "one or more demographic and/or psychographic and/or firmographic criteria."

Method claims 98 and 99 require additionally that the "bid" be "one of two or more ad placement factors." *Id.* Method claim 99 adds that the other "ad placement factor(s)" include one or more of the following: (a) the ad's actual or projected popularity and/or click through rate (CTR); (b) popularity and/or importance and/or desirability of various criteria to an entity, user, seeker and/or an advertiser and/or system operator(s); (c) relationship of the advertiser and/or entity, user, seeker to the system operator; (d) advertiser cost of one or more of the criteria; (e) credit standing of the advertiser; (f) length of time advertiser has been utilizing system; (g) total money spent by advertiser; and (h) past match queries. *Id.* Method claim 108 covers the additional step of using weighted "ad placement factors." *Id.* 

#### III. The Instant Lawsuit, Facebook's Motion, and the District Court's Order

Morsa filed this lawsuit for infringement of the patents-in-suit against Facebook on February 4, 2014. A106. Facebook filed its answer on March 28, 2014, raising an affirmative defense of non-infringement, but did not file a motion to dismiss the complaint under Rule 12(b)(6). A208. Under the district court's scheduling order, which required Morsa to elect 20 claims of the patents-in-suit, Morsa selected the asserted claims on September 16, 2014. A246. Also pursuant to the scheduling order, the parties exchanged proposed terms for claim construction on October 14, 2014, and exchanged proposed constructions and extrinsic evidence on November 4, 2014. A247.

Just over a week later, on November 13, 2014, Facebook filed the Motion under Rule 12(c), arguing that all of the asserted claims of the patents-in-suit were directed to abstract ideas of "matching an advertisement to a consumer based on information about the consumer, and allowing advertisers to bid on ad placement," and do not add any inventive concept that could transform them into patent-eligible inventions. *See* A613–17.

Notably, Facebook failed to introduce any evidence, let alone clear and convincing evidence, supporting its claims that the allegedly abstract ideas underlying the asserted claims were longstanding concepts that could be performed without a computer and that the asserted claims did not improve upon these allegedly

abstract ideas. Rather, Facebook erroneously compared Morsa's inventions to the state of the prior art—not to any age-old advertising concepts.

The district court granted the Motion, finding that the asserted claims are directed to *multiple* abstract ideas. Yet, neither Facebook nor the district court could express these abstract ideas in a single, consistent formulation. To the contrary, both Facebook and the district court expressed the alleged abstract ideas covered by the patents-in-suit in varying formulations, illustrating their difficulty in pinpointing any single, abstract idea embodied by the asserted claims:

- "Facebook argues the asserted claims are directed to two abstract ideas: (1) determining the advertisement that will be shown to a consumer based on that consumer's demographic information; and (2) using advertiser bids to determine whether and how an advertisement will be displayed." A10; *see also* A930–31 (describing Facebook's varying formulations of the allegedly abstract idea embodied by the asserted claims).
- "The above claims make clear that the purpose of the patents is to (1) target advertisements to certain internet users based on their characteristics and (2) permit advertisers to bid to have their ads shown to those users based on those characteristics." *Id*.
- "[T]he claims here are drawn to two abstract ideas: targeting advertisements to certain consumers, and using a bidding system to determine when and how advertisements will be displayed." A12.
- "[T]he asserted claims are drawn to the abstract ideas of (1) displaying advertisements to consumers based on their demographic information, and (2) permitting advertisers to bid on whether and how their advertisements will be displayed." A15.

By examining these distinct, oversimplified, allegedly abstract ideas in isolation, and disembodied from the fundamental aspects of the asserted claims, the district court easily concluded they were "long-standing, well-known concepts" with "no particular concrete or tangible form." A10–13. Ignoring that the use of a computer (having a match engine) is *integral* to the functioning of the asserted claims, among other technological elements, the district court further found that the asserted claims had no inventive concept, but spoke only of "generic computer elements" and that the limitations of the asserted claims add only "conventional steps" that did not prevent them from monopolizing the underlying abstract ideas. A13–15.

#### **SUMMARY OF ARGUMENT**

The district court committed numerous errors in dismissing Morsa's patent infringement action on the ground that all asserted claims of the patents-in-suit fail to claim patent-eligible subject matter under 35 U.S.C. § 101.

Initially, the district court misapplied the first step of the *Alice* test by focusing on one of many stated advantages of the patents-in-suit over the prior art, ignoring the particular problems solved by the patents-in-suit, and reading out the particular limitations of the claims, which it erroneously believed were relevant only to the second step of the *Alice* analysis. In doing so, the district court could not even focus on a single abstract idea to which the claims were drawn.

By selectively focusing on a singular advantage of the patents-in-suit, divorced from the actual limitations of the claims, the district court incorrectly considered whether a *concept*—as opposed to any one of the *claims*—was drawn to "an idea, having no particular concrete or tangible form" in accordance with *Ultramercial*. Because concepts are by definition "abstract," especially when applied to methods, the asserted claims were thus destined to be found "abstract."

The district court also improperly shifted the burden of proof to Morsa by failing to accept Morsa's factual averments as true and to construe any factual disputes in the light most favorable to Morsa, and requiring that Morsa disprove Facebook's unsupported attorney arguments, arguments that alone could not

possibly constitute clear and convincing evidence. Under the correct standard, it is clear that the asserted claims are not abstract because they cover a technological process that produces a concrete and tangible thing, include tangible limitations, and solve problems with the prior art particularly related to computers and the Internet.

Next, the district court erroneously applied step two of the *Alice* analysis by dismissing concrete limitations in the claims as mere "abstract ideas," conflating step two with step one of the analysis, such that its conclusion with respect to step one necessarily resulted in the same conclusion for step two.

As with respect to step one, the district court also relieved Facebook of its burden of proof with respect to step two, impermissibly construing the claims in *Facebook's* favor, when they should have been construed in the light most favorable to Morsa. Facebook did not even argue that the majority of the asserted claims lacked novelty, nor did it produce any evidence that would demonstrate that the claims lacked novelty. Nonetheless, the district court rejected Morsa's arguments, effectively requiring Morsa to disprove Facebook's flawed interpretation of the claims.

Because the asserted claims are directed to improving an existing technological process of advertising over the Internet, and solving problems unique to the Internet, the district court's conclusion that the asserted claims lack inventive

concept is not supported by clear and convincing evidence. The specific references to computer elements in the claims only reinforce this fact.

#### **ARGUMENT**

#### I. Statement of the Standard of Review

In reviewing a district court's grant of a judgment on the pleadings in a patent case, this Court follows the procedural law of the regional circuit. *See, e.g., Brooks v. Dunlop Mfg. Inc.*, 702 F.3d 624, 628 (Fed. Cir. 2012); *Merck & Co. v. Hi-Tech Pharmacal Co.*, 482 F.3d 1317, 1320 (Fed. Cir. 2007). Under the law of the Ninth Circuit, the Court reviews *de novo* a district court's grant of a Rule 12(c) motion for judgment on the pleadings. *See Harris v. County of Orange*, 682 F.3d 1126, 1131 (9th Cir. 2012). The Court reviews *de novo* a district court's determination of patent eligibility under 35 U.S.C. § 101. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1255 (Fed. Cir. 2014).

"A judgment on the pleadings is properly granted when, taking all the allegations in the non-moving party's pleadings as true, the moving party is entitled to judgment as a matter of law." *Marshall Naify Revocable Trust v. United States*, 672 F.3d 620, 623 (9th Cir. 2012). Thus, the Court "must accept all factual allegations in the complaint as true and construe them in the light most favorable to the non-moving party." *Fleming v. Pickard*, 581 F.3d 922, 925 (9th Cir. 2009).

#### II. The Patents-in-Suit Claim Patentable Subject Matter.

#### A. Legal Standards Applicable to Section 101

Section 101 defines patentable subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. But "laws of nature, natural phenomena, and abstract ideas" are not eligible. *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

Section 101 thus plainly encompasses software. Indeed, the Supreme Court recognized in *Alice* that "many computer-implemented claims are formally addressed to patent-eligible subject matter." 134 S. Ct. at 2359. This Court has repeatedly reached the same conclusion. *See DDR Holdings*, 773 F.3d at 1259; *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 862–64 (Fed. Cir. 2010); *Eolas Techs. Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1339 (Fed. Cir. 2005); *In re Alappat*, 33 F.3d 1526, 1545 (Fed. Cir. 1994) (en banc).

Of course, Morsa acknowledges that merely because software is not categorically excluded from patent eligibility does not mean that every software claim satisfies § 101. Software claims are subject to the very same § 101 standards that apply to all other categories of patents—no more generous and no more restrictive. Software claims are also subject to the other distinct patent requirements under Sections 102, 103, and 112—standards that the district court did not apply in finding the asserted claims invalid.

The Supreme Court has established a two-step test to "distinguish[] patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 134 S. Ct. at 2355. The Court first "determine[s] whether the claims at issue are directed to one of those patent ineligible concepts." *Id.* In performing this step, the Court must examine each claim to determine whether the ordered combination of limitations merely "recites an abstraction—an idea, having no particular concrete or tangible form." *Ultramercial*, 772 F.3d at 715.

If—and only if—the asserted claims are directed to an abstract idea, the Court "determine[s] whether the additional elements 'transform the nature of the claim' into a patent eligible application." *Id.* The Supreme Court has further "described step two of this analysis as a search for an 'inventive concept'—i.e., an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S. Ct. at 2355 (alteration in original).

The Supreme Court has described "the concern that drives this exclusionary principle as one of pre-emption." *Alice*, 134 S. Ct. at 2354. That concern requires a careful balance: while "[m]onopolization" of "[l]aws of nature, natural phenomena, and abstract ideas"—the "basic tools of scientific and technological work"—would "tend to impede innovation more than it would tend to promote it," it is also true that

too broad an application of "this exclusionary principle" would "swallow all of patent law," as "[a]t some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Id.* (quotations omitted).

Indeed, *Alice* clarified that the abstract-ideas exception does not apply if the invention "solve[s] a technological problem in 'conventional industry practice," "improve[s] an existing technological process," or otherwise "effect[s] an improvement in any other technology or technical field." 134 S. Ct. at 2358–59. While the Supreme Court did not hold that an invention *must* represent a technological advance to be patent-eligible under § 101, *Alice* indicates that a claim that *does* represent such an advance is patent-eligible.

Although the Supreme Court has not "delimit[ed] the precise contours of the 'abstract ideas' category" in resolving *Alice*, over the course of several cases the Court has provided some important principles. *See DDR Holdings*, 773 F.3d at 1256. For example, mere "mathematical algorithms, including those executed on a generic computer, are abstract ideas." *See id.* (citing *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972)). Further, "some fundamental economic and conventional business practices are also abstract ideas," including the "fundamental economic practice of hedging" and "intermediate settlement." *See id.* (citing *Bilski v. Kappos*, 561 U.S. 593, 611 (2010); *Alice*, 134 S. Ct. at 2356).

There are cases where "patent-ineligible abstract ideas are plainly identifiable and divisible from the generic computer limitations recited by the remainder of the claim." See DDR Holdings, 773 F.3d at 1256. In Alice, the claims "simply instruct[ed] the practitioner to implement the abstract idea of intermediated settlement on a generic computer." 134 S. Ct. at 2359. In *Ultramercial*, this Court held that the use of "advertising as a currency" over the Internet was an abstract idea. 772 F.3d at 715–16. The claims at issue in buySAFE, Inc. v. Google, Inc., 765 F.3d 1350 (Fed. Cir. 2014), merely implemented the abstract idea of creating a "transaction performance guarantee" using a computer network. Id. at 1355. Similarly, the claims at issue in Accenture Global Services, GmbH v. Guidewire Software, Inc., 728 F.3d 1336 (Fed. Cir. 2013), implemented the abstract idea of "generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event" on generalized software components. Id. at 1344-45. In Bancorp Services, L.L.C. v. Sun Life Assurance Co. of Canada (U.S.), 687 F.3d 1266 (Fed. Cir. 2012), the claims implemented the abstract idea of managing a stablevalue protected life insurance policy using a computer. *Id.* at 1278.

All of these concepts are "fundamental . . . practice[s]" and "building block[s]," *Alice*, 134 S. Ct. at 2356, that are "basic concept[s]," "undisputedly well known," that "humans have always performed," *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014), and that are

of "ancient lineage," buySAFE, 765 F.3d at 1355. While many of these claims recited "various computer hardware elements," the claims were not patent-eligible because they were substantively "directed to nothing more than the performance of an abstract business practice on the Internet or using a conventional computer." DDR Holdings, 773 F.3d at 1256.

On the other hand, patent claims directed to a technological problem specific to the digital environment do not implement *any* abstract idea. *DDR Holdings*, 773 F.3d at 1257 (distinguishing the claims at issue from those in *Alice* and other cases "because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet," but are "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks"). Thus, when the digital environment "introduces a problem that does not arise in the 'brick and mortar' context," and the claim is directed at solving that particular problem, it typically is not an abstract idea. *Id.* at 1258. For the same reason, a claim that "presents functional and palpable applications in the field of computer technology" is not excluded by § 101. *Research Corp. Techs.*, 627 F.3d at 868.

Here, the district court erred in both steps of the analysis. It incorrectly found that the asserted claims are directed to multiple, varying "abstract ideas." And it

erred in its assessment of whether the limitations of the asserted claims were sufficient to transform these alleged ideas into a patent-eligible application.

# B. The District Court Erroneously Found that the Asserted Claims Are Directed to Multiple, Varying Abstract Ideas.

1. The District Court Misapplied *Alice* by Ignoring the Asserted Claims and Focusing on a "Purpose" of the Patents-in-Suit.

As with the appellants in *DDR Holdings*, neither Facebook nor the district court could express the alleged abstract idea embodied by the asserted claims in a single, consistent formulation, as required by *Alice*. Rather, both Facebook and the district court expressed the alleged abstract ideas covered by the patents-in-suit in varying formulations (described above). The difficulty in articulating a consistent formulation of the alleged abstract idea covered by the asserted claims underscores the inherent difficulty in (and importance of) *correctly* applying *Alice*. *See DDR Holdings*, 773 F.3d at 1257.

But here, the district court focused on a single stated advantage of the alleged invention as support for its varying formulations of the alleged abstract ideas covered by the claims. A10. In doing so, the district court improperly ignored the many other advantages of the patents-in-suit, *see* A42–43 (6:11–7:25), the particular problems solved by the patents-in-suit, A41–42 (3:30–5:36), and, critically, the limitations of the asserted claims themselves, which define concrete methods and systems that employ a software engine over a computer network to match advertiser offerings

with particular consumers in a customized and prioritized manner. *See* A12 ("[T]hese limitations do not alter the claims' underlying concept in any meaningful way. If they are relevant, then, it is *only* at the next step in the Court's invalidity analysis.") (emphasis added).

By ignoring the fundamental limitations of the asserted claims, the Court ignored the guidance of *Ultramercial*, which held that step one of the *Alice* analysis must start with an examination of the *claims* "because claims are the definition of what a patent is intended to cover." 772 F.3d at 714. It further improperly conflated step one with step two of the *Alice* analysis by filtering out meaningful, concrete (and tangible) claim limitations *before* considering whether the claims cover an abstract idea. While limitations covering purely conventional activity will not save an otherwise abstract claim in step two, the district court could not properly ignore such limitations in applying step one by focusing only on a stated advantage of the inventions.

Indeed, the district court's error appears to be based on a fundamental misunderstanding (and misapplication of *Alice*). In rejecting Morsa's argument below, the district court stated that "The dispositive inquiry is whether the *concept* to which a claim is drawn has 'no particular concrete or tangible form." A11 (citing *Ultramercial*, 772 F.3d at 715) (emphasis added). But this misstates the relevant inquiry. *Alice* requires consideration of whether the *claim*—not the *concept*—is

directed to "an idea, having no particular concrete or tangible form." *See Ultramercial*, 772 F.3d at 715 ("*This ordered combination of steps* recites an abstraction—an idea, having no particular concrete or tangible form.") (emphasis added). In misapplying the standard, the district court created a self-fulfilling prophecy, where the asserted claims were destined to fail.

In effect, Facebook and the district court merely "cherry-picked" one of many stated advantages of the patents-in-suit and labeled the concepts stated therein as "abstract." But the district court's incorrect approach would allow any process or method claim to be categorized as an "abstract idea," because *every* process or method is—at bottom—the "idea" of performing a series of steps to achieve a particular outcome. If § 101 excluded all such "ideas," any process claim could be rendered non-patentable. *See Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 345 (1961) ("[T]here is no legally recognizable or protected 'essential' element, 'gist' or 'heart' of the invention."); *Mayo*, 132 S. Ct. at 1293 ("[T]oo broad an interpretation of [the 'abstract idea' exception to § 101] could eviscerate patent law. For all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas."). The district court's incorrect

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<sup>&</sup>lt;sup>4</sup> See also Accenture, 728 F.3d at 1346 (Rader, J., dissenting) ("[A]ny claim can be stripped down, simplified, generalized, or paraphrased to remove all of its concrete limitations, until at its core, something that could be characterized as an abstract idea is revealed. A court cannot go hunting for abstractions by ignoring concrete, palpable, tangible limitations of the invention the patentee actually claims.").

application of *Alice* oversimplifies the claims, ignores various claim limitations, and swallows the rule of § 101.

Moreover, Facebook never alleged, and the district court never found, that the asserted claims embody a *single* abstract idea, as required by *Alice*. Instead, the district court found that the patents-in-suit cover *multiple* concepts (and thus multiple alleged abstract ideas), but it never considered whether the combination of those concepts in the unique circumstances described in the patents-in-suit made the inventions patent eligible under § 101. This failure is significant, as it indicates that the practice of combining both concepts in a concrete implementation is *not* a "longstanding rule," "a fundamental economic practice prevalent in our system of commerce," or "a building block of the modern economy." *See Alice*, 134 S. Ct. at 2355–57.

By divorcing the separate, distinct concepts of "targeted advertising" and "placing bids" from the asserted claims, the district court failed to consider the claims "as a whole" and necessarily ignored that the combination of the concepts (as implemented in the claims) is *not* a fundamental economic or longstanding commercial practice. *See Diehr*, 450 U.S. at 176 ("Respondents' claims must be considered as a whole, it being inappropriate to dissect the claims into old and new elements and then ignore the presence of old elements in the analysis."). There is simply no evidence to support a finding that the asserted claims' concrete, tangible

implementations of these concepts are in fact abstract ideas, let alone clear and convincing evidence, as discussed in detail below.

2. The District Court Improperly Shifted the Burden of Proof to Morsa to Show the Absence of an Abstract Idea and Failed to Construe the Record in the Light Most Favorable to Morsa.

Facebook failed to cite, and the district court did not rely upon, any evidence showing that the combination of these alleged abstract ideas was well known at the time of the patent. *See* A10–A11. The only alleged "evidence" supporting Facebook's argument was an appendix submitted with its brief containing pure attorney argument. *See* A824–35. The district court's conclusion that the asserted claims covered abstract ideas is thus unsupported by any evidence, let alone the clear and convincing evidence necessary to invalidate a patent under § 101. *See Accenture*, 728 F.3d at 1346 ("On [a motion to dismiss], . . . the complaint and the patent must by themselves show clear and convincing evidence that the claim is not directed to an application of an abstract idea, but to a disembodied abstract idea itself."). This is especially true considering that the district court did not construe the claims in the light most favorable to Morsa. *See id*.

Further, the district court also ignored the procedural posture of the case, failing to accept as true and construe the well-pleaded factual allegations of the complaint in the light most favorable to Morsa, including that (a) the patents-in-suit improved "age old" traditional advertising vehicles, such as newspapers, magazines,

search engines, televisions, radio, phone directories, direct mail, web sites, billboards, and insert media, A43 (7:21-25), (b) Facebook failed to introduce its infringing advertising services until November 2007, A109, and thereafter became a huge commercial success, A1017,5 (c) Facebook's arguments to the PTO that claims directed to payments and bidding for targeted advertising were not abstract ideas, A959, A973, A976–77, A1004,6 (d) there are specific tangible limitations in the patents-in-suit, such as those found in claims 118, 119, and 129 of the '337 patent, and (e) the PTO issued more than 150 patents relating to advertising since Alice, A1127–29.7 All of these facts contradicted Facebook's argument that the patents-in-suit covered abstract ideas, but were not accepted as true and construed in the light most favorable to Morsa by the district court. See Fleming, 581 F.3d at 925. It was improper for the district court to substitute its judgment in place of facts and inferences required to be drawn in Morsa's favor on a motion for judgment on the pleadings.

<sup>&</sup>lt;sup>5</sup> While not part of complaint, Facebook's Quarterly Earnings Slides contain public revenue figures that were submitted to the SEC, so it was properly subject to judicial notice. See, e.g., Northstar Fin. Advisors Inc. v. Schwab Investments, 779 F.3d 1036, 1043 (9th Cir. 2015) (holding that the court could take judicial notice of SEC filings).

<sup>&</sup>lt;sup>6</sup> Facebook's statements to the PTO were also properly subject to judicial notice. See, e.g., Standard Haven Prods., Inc. v. Gencor Indus., Inc., 897 F.2d 511, 514 n.3 (Fed. Cir. 1990) (holding that this Court could take judicial notice of PTO records).

<sup>&</sup>lt;sup>7</sup> Again, PTO records are subject to judicial notice. *See* 897 F.2d at 514 n.3.

3. The District Court's Conclusion that the Patents-in-Suit Cover Abstract Ideas Is Not Supported by Clear and Convincing Evidence.

It is clear that the asserted claims do not recite a mathematical algorithm. Nor do they recite a fundamental economic or longstanding commercial practice. Rather, the asserted claims are directed to a process that produces *concrete* and *tangible* results. They do not merely apply an abstract idea to a computer over a network, like the claims at issue in *Ultramercial* and other cases. *See DDR Holdings*, 773 F.3d at 1259 (holding that claims, while not technologically complex, did not recite a commonplace business method aimed at processing business information ,applying a known business process to the particular technological environment of the Internet, or creating or altering contractual relations using generic computer functions and conventional network operations).

For example, method claim 12 of the '337 patent contains an express purpose of "generating an advertising presentation using at least in part a computer-compatible network." A59 (emphasis added). The express goal of this claim is to create a tangible product—an advertising presentation on a computer that is customized to each particular user and prioritized based on bids paid by advertisers. Every claim element is in service of, and necessary to, the recited method of creating such an advertising presentation: there must be a database of searchable advertisements with associated bids and a match engine that identifies

advertisements having criteria that match with users and that arranges the advertisements into the presentation according to the bid values. Indeed, a sample ad presentation is provided directly in the patent as Figure 7. A36; A45 (11:38–39); A52 (25:43–26:15). Method claim 1 of the '020 patent even requires a determination of ad placement in the presentation based upon "ad performance and/or popularity," A101, which is measurable by the number of times a user "clicks" on the ad. *See* A53 (27:52–54).

In addition, method claims 118 and 119, as well as system claim 129, of the '337 patent include limitations regarding the collection of negative criteria to determine when to *exclude* an ad from the advertising presentation—a tangible product. A64–65. And method claims 12 and 13 of the '020 patent also involve tangible things. Claim 12 requires delivery of the ad presentation to a wireless device; claim 13 requires the ad presentation to be of a certain tangible type—a video and/or audio ad. A101. Other claims require specific, tangible displays of information, including system claims 127 and 128 of the '337 patent and method claim 5 of the '020 patent. A65, A101.

The asserted claims are thus like the claim in *Diehr*, which the Supreme Court held was *not* directed to an abstract idea. 450 U.S. at 184. The claim there was for a "method of operating a rubber-molding press for precision molded compounds with the aid of a digital computer." *Id.* at 179 n.5. It recited the use of a mathematical

formula, the "Arrhenius equation," as part of a "step-by-step method" for curing rubber. *Id.* at 179 & n.5, 184. The Supreme Court explained that "Arrhenius' equation is not patentable in isolation." *Id.* at 188. But the claim was not directed to "patent[ing] [that] mathematical formula." *Id.* at 187. Instead, it sought "patent protection for a process of curing synthetic rubber." *Id.* 

As in *Diehr*, the asserted claims do not seek to patent a "mathematical formula" or any other abstract concept. Instead, they cover specific systems, and step-by-step processes—implemented through software—for automatically generating an advertising presentation on a computer that is customized to each particular user and prioritized based on bids paid by advertisers. No less than the rubber-curing method in *Diehr*, the claims cover specific processes and systems that produce a tangible result. They, too, should be "eligible to receive the protection of our patent laws." *Id.* at 184.

The district court's suggestion that "targeted advertising, insofar as matching consumers with a given product or service, has been practiced as long as markets have been in operation" misses the mark. *See* A10–11. Not only is this conclusion unsupported by any evidence, let alone clear and convincing evidence, it ignores the fact that the asserted claims of the patents-in-suit do not claim mere "targeted advertising," which is a generic concept that does not result in the same problems as pay for placement search systems, such as the limitations of "search terms" in

Internet searches. *See*, *e.g.*, A41 (3:47–67). The inherent problems with "search terms" could not possibly have been raised (nor solved) in the direct mailer context, where just one advertiser could selectively target consumers based on zip codes. *See* A11. The patents-in-suit address the challenge of matching ad criteria with user criteria over the Internet, and specifically distinguish "age old" methods of advertising, including "direct mailers." A42 (7:21–25).

The district court's suggestion that the concept of advertisers "placing bids . . . that determine whether and how their advertisements will be displayed, for instance, by paying more to be featured more prominently on a newspaper page" is equally misplaced. A11. The patents-in-suit do not merely cover the act of placing bids on advertisements. Rather, they utilize computers and the Internet to allow a "real time," continual competitive bidding process, where "rank positions" are dynamically generated and updated based on the amount of incoming bids. *See*, *e.g.*, A43 (8:59–63); A52 (25:59–26:15).

with a match engine, Morsa solved another problem unique to "pay for placement search systems," which effectively limit the number of advertisers that achieve visibility among users, since users typically view only the first few pages of search results. See A41 (4:1–18); see also A53 (27:20–27) ("[Y]our exact position within any particular result list is far less important than is your position among the group

of companies (potentially including some of your competitors) directly targeting the same exact people you are. That's where your position matters most."). Again, this problem is unique to the prior art—it is not applicable to the generic concept of placing bids on advertisement space.

## C. The District Court Erroneously Found that the Asserted Claims Lack Inventive Concept.

Step two of the *Alice* test assumes the Court has found that the patent claims are directed to an abstract idea at step one. Because the asserted claims are not directed to an abstract idea at all, the Court need not go further. But even if the Court were to assume the patents-in-suit are directed to an abstract idea (or abstract ideas), the asserted claims include additional features to ensure that the claims are more than "a drafting effort designed to monopolize" an abstract idea. *See Alice*, 134 S. Ct. at 2357. Clearly, the claims do not simply state an abstract idea and add the words "apply it." *Id*.

# 1. The District Court Improperly Conflated Step Two with Step One of *Alice*.

In determining that the asserted claims failed to add "inventive concept" to the alleged abstract ideas embodied by the claims, the district court rejected Morsa's argument that "the claims *themselves* contain inventive concepts through their various limitations." A14 (emphasis in original). In doing so, the district court held that the "limitations [cited by Morsa] are not nearly as significant as Morsa suggests"

abstract concept, as discussed above in the first step of the Court's Mayo analysis."

Id. (emphasis added). But the significance of particular claim limitations under step two of Alice is not determined by whether they are abstract concepts. By focusing on whether the claim limitations cited by Morsa were "abstract concepts," the district court erroneously conflated steps one and two of the Alice analysis, effectively repeating the same analysis to satisfy both steps.

2. The District Court Improperly Shifted the Burden of Proof to Morsa to Show an Inventive Concept and Failed to Consider the Record in the Light Most Favorable to Morsa.

Facebook came forward with no evidence to support the district court's finding that the claims lack inventive concept and monopolize their underlying abstract ideas. *See* A617–19, A1148–49. In fact, Facebook presented no argument, let alone evidence, that claims 118, 119, of the '337 patent and claims 2, 3, 5, 11, 13, 18, 22, 23, 25, 29, and 108 of the '020 patent lack an inventive concept. A618. Instead, Facebook focused on just a handful of claims, claims 12 and 126–129 of the '337 patent and claims 1, 12, 97, and 113 of the '020 patent. *See id.* Morsa never agreed that any of these claims were representative, and the district court made no such finding. Yet, the district court invalidated all of the asserted claims on the same basis. *See* A13–15. This was erroneous, as each asserted claim carries a separate presumption of validity, requiring proof of invalidity by clear and convincing

evidence. *See* 35 U.S.C. § 282; *Microsoft*, 131 S. Ct. at 2252. As discussed in detail below, these claims all contain inventive concept because they improve upon existing technologies for advertising on the Internet.

With respect to claims 12 and 126–129 of the '337 patent and claims 1, 12, 97, and 113 of the '020 patent, the district court found that "some of these claims contain no computer element of any kind" and others that do "speak only of generic computer elements such as 'processor electronics configured to perform operations." A13. This finding effectively construed the claims—but in the light most favorable to *Facebook*. A618. This was improper, since the district court was required, on a motion for judgment on the pleadings, to "construe[] the claims in the light most favorable to the patentee" or require Facebook "to establish subject matter ineligibility by clear and convincing evidence." *See Accenture*, 728 F.3d at 1346. The district court did neither, as explained in further detail below.

# 3. The District Court's Conclusion that the Claims Lack Inventive Concept Is Not Supported by Clear and Convincing Evidence.

Under a proper construction of the claims, viewed in the light most favorable to Morsa, each claim improves on the state of "pay for placement search systems" that are used on the Internet, and no claim monopolizes the alleged abstract ideas of targeted advertising and bid placement. *See Alice*, 134 S. Ct. at 2358 (explaining that the Supreme Court in *Diehr* approved claims covering a computer-implemented

process for curing rubber because those claims "improved an existing technological process, not because they were implemented on a computer").

While it is true that the asserted claims involve a computer and the Internet, the asserted claims stand apart from patent-ineligible claims because they do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of advertising over computer networks.

In particular, the patents-in-suit address the problems inherent in "pay for placement search systems" that were common at the time of the inventions, where advertisers could pay to have their advertisements appear when users entered specific search terms in Internet search engines. *See* A40–41 (2:43–3:29). These systems had a number of major problems that Morsa sought to overcome with the patents-in-suit. Notably, Morsa recognized that advertisers were unnecessarily constrained by the search terms selected by users, which were inherently difficult to predict, could not identify unrelated offerings that might interest users, and failed to account for geographic information about users. *See* A41–42 (3:30–5:43). Further, Morsa recognized that the prior art systems arbitrarily limited the number of advertisers that could obtain ideal ad placement. A41 (4:1–28).

The patents-in-suit solve all of these problems, which are *unique* to Internet advertising, by collecting various criteria about users, as opposed to mere search terms, matching it with criteria relating to advertisements, and creating customized advertising presentations that contain only relevant advertisements in a format that is prioritized based on a competitive bidding process. For example, system claim 126 of the '337 patent (from which asserted claims 127, 128, and 129 depend) recites a computer system that (1) associates certain attributes with an advertisement, (2) receives input from a user device including certain attributes about the user, (3) identifies matches between the attributes of the advertisement and the attributes of the user; and (4) presents the advertisement to the user. See A65. Thus, rather than merely matching ads to users' arbitrary search terms, the invention provides users with advertising presentations that are customized to the users' attributes and prioritized based on the advertisers' bids.

This is further exemplified by method claims 2 and 99 of the '020 patent, which requires the consideration of a "click through rate (CTR), frequency of ads clicked on, number/choices of ads clicked on." A101, A104. This limitation has no application to the traditional targeted advertising or bidding, but it is unique to Internet advertising, where the click-through rate increases the amount each advertiser must pay for the advertisement. A42 (5:62–66). Similarly, method claim 25 of the '020 patent adds the additional step of "enabling or setting one or

more advertiser notifications." A101. Notifications are specific software routines that automatically execute upon the occurrence of a specified event, such as where an advertiser's bid on a given criteria is automatically increased by some amount as a result of another competing advertiser's change in position within the result list. A49 (19:18–50).

The asserted claims thus parallel the claims at issue in *DDR Holdings*, a case the district court failed to consider. The patent in *DDR Holdings* addressed a problem "particular to the Internet"—how a host website can retain visitors that click on a link to a third-party merchant's advertisement. 773 F.3d at 1257. To solve this problem, the claimed system in *DDR Holdings* generates a "hybrid" website that retains the "look and feel" of the host's website, but allows the visitor to buy products from the third-party merchant, without actually visiting the merchant's website. *Id.* at 1257–58. The Court in *DDR Holdings* held that the claims reflected an inventive concept because "the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." Id. at 1257. Further, despite the fact that the claims at issue were not "technologically complex," the Court held that they were "different enough in substance" from claims in prior cases that "broadly and generically claim[ed] 'use of the Internet' to perform an abstract business practice" to be patent-eligible

because they specified "how interactions with the Internet are manipulated to yield a desired result" when clicking a hyper-link. *Id.* at 1258–59.

As in *DDR Holdings*, the asserted claims are "necessarily rooted in computer" technology in order to overcome a problem specifically arising in the realm of computer[s]." *Id.* at 1257. They provide systems and methods for automatically generating an advertising presentation on a computer that is customized to each particular user and prioritized based on bids paid by advertisers—without requiring the user to enter any search terms, or producing the many problems of the prior art. The asserted claims constitute a technological advance that is sufficiently "unlike the claims in Alice" and other cases "that were found to be 'directed to' little more than an abstract concept." Id. at 1259. In fact, Morsa detailed the advantages of his inventions over the prior art in the specification. A42-43 (6:11-7:25). And the improvements over the prior art can be readily discerned by even a quick comparison of the generic keyword-driven ads produced by Yahoo! search and the personalized ads presented on Facebook. It is the type of "new and useful advance[] in technology" the patent system was designed to encourage and protect. Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998).

Like the claims at issue in *DDR Holdings*, the asserted claims "do not broadly and generically claim 'use of the Internet' to perform abstract business practice (with insignificant added activity)." 773 F3d at 1258. Unlike the claims in *Ultramercial*,

the asserted claims "specify how interactions with the Internet are manipulated to yield a desired result—a result that overrides the routine and conventional sequence of events ordinarily" obtained by running conventional pay for placement search systems. *See id.* Instead of placing bids on specific search terms used by consumers in an Internet search, the system allows advertisers to bid on criteria common to advertisements and users. This results in refined advertisement presentations that are customized for the specific user and prioritized according to the bids placed by advertisers.

The explicit references to computer elements in the claims only reinforce the fact that the invention, when taken as a whole and construed in the light most favorable to Morsa, is directed to an improvement of existing computer-based technologies, and not merely a restatement of an abstract idea. For example, method claim 12 of the '337 patent explicitly references a "database," which is particularly described as having records with a specific structure in Figure 5. *See* A76; A87 (11:29–30); A89 (16:45–18:19). It also explicitly requires "a computer-compatible network," without which users and advertisers could not submit criteria information, and the advertising presentation could not be transmitted to the user. *See* A59; A46 (13:9–18) ("[C]lient computers 12 communicate through the network 20 with various product, service, and benefit providers, including account management server 22, match engine server 24, and advertiser servers 14 using the functionality

provided by a Hypertext Transfer Protocol (HTTP), although other communication protocols, such as FTP, SNMP, TELNET, and a number of other protocols known in the art, may be used."). Claim 126 of the '337 patent recites a system "comprising processor electronics" that perform a "match" determination. Claims 1 and 97 of the '020 patent similarly recite and require the use of a "processor" working in conjunction with a "network."

And, while not expressly referenced in method claim 12 of the '337 patent, the specification makes clear that *all* asserted claims cover and require the use of a "match engine" running on a computer processor. A42 (6:43–49). The match engine is software with related structure that is specifically configured to match in real time the characteristics of users with advertisements. *See* A42 (6:43–49); A44 (10:20–26). The patents-in-suit contain specific teachings regarding the functionality of the match engine software, permitting matches based on "exact matches," or alternatively based on "canonicalized" matches, string matching algorithms, or using a thesaurus database. *See* A50 (22:44–52); A50–51 (22:53–23:15). Similar software is also necessary to implement the competitive bidding process. A46 (13:52–56, 14:14–19).

These technological elements are fundamental to the asserted claims and show that the use of a computer is not merely an unnecessary add-on feature, resulting from clever draftsmanship, but rather an *integral* element of the claimed inventions.

See Bancorp, 687 F.3d at 1278 ("To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not."); SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1333 (Fed. Cir. 2010) ("In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations."). Indeed, absent computers and the Internet, Morsa's inventions could not be practiced at all.

The district court's conclusion that the asserted claims preempt the alleged abstract ideas of targeted advertising and bid placement and add nothing more than "conventional steps" is not supported by any evidence, let alone clear and convincing evidence. In fact, the limitations prevent preemption of any "abstract idea," however defined. For example, method claim 12 of the '337 patent requires matching based on specific criteria ("demographic and/or psychographic and/or firmographic"), requires the bid amount to be "modifiable," and requires the advertisement to be "searchable." A59. Method claim 113 of the '337 patent is similarly restricted to specific criteria ("multigraphic and/or firmographic") and also requires that the source of that criteria be from the user ("receiving input from a user

compris[ing] one or more multigraphic and/or firmographic attributes"). A64. System claims 127, 128, and 129 of the '337 patent likewise require specific criteria and are each further limiting by requiring that "the advertisement [be presented] to the user in conjunction with search results and/or additional content" (claim 127), that the "presentation order and/or size and/or location" be determined based on a specified factor (claim 128), and that "negative" criteria be used to determine when *not* to present an advertisement to a user (claim 129). A65.

With respect to the '020 patent, method claim 1 recites additional features by requiring the identification of specific criteria ("demographic and/or psychographic and/or firmographic") and a determination of ad placement not only based on a bid associated with the ad, but also in accordance with "ad performance and/or ad popularity." A101. Similarly, method claim 12 further limits claim 1 by requiring a specific delivery location of the advertisement (to a wireless device). *Id*.

Although Facebook introduced no evidence showing that the remaining claims (claims 118 and 119 of the '337 patent, and claims 2, 3, 5, 11, 13, 18, 22, 23, 25, and 108 of the '020 patent) lacked an inventive concept (and failed to even argue the point), the district court nevertheless found that the limitations in these claims were equally monopolistic. But, like system claim 129, method claims 118 and 119 of the '337 patent recite the use of negative criteria to prevent display of advertisements to certain users. A64–65. Method claims 2, 3, 5, 11, 13, 18, 22, 23,

25, and 108 of the '020 patent include further requirements: claim 2 adds further specificity to "ad performance and/or ad popularity"; claim 3 requires placing an ad based on geographic location; claim 5 requires displaying a bid amount that would improve ad placement; claim 11 further requires weighting the ad placement factor(s); claim 13 requires a specific type of advertisement (video and/or audio); claim 18 further requires tracking performance of the ad; claims 22 and 23 relate to the manner in which criteria are collected and stored; claim 25 further requires advertiser notifications; and claim 108 requires the use of at least two ad placement factors, where at least one is weighted. A101, A104.

Thus—and dispositive to the preemption inquiry—there are numerous ways to practice the alleged abstract ideas of targeted advertising and bid placement without infringing upon the patents-in-suit. Not only did Facebook never dispute this critical fact, Facebook raised an affirmative defense of non-infringement on account of allegedly absent technical limitations, despite practicing the abstract ideas that it identifies. The inferences from these facts, which the district court erred in failing to draw in Morsa's favor on a motion for judgment on the pleadings, are that the asserted claims do not preempt the abstract ideas identified by the district court.

Moreover, the limitations of the asserted claims are not "conventional" because they represent a significant improvement over the prior art. The patents specifically identify the shortcomings of prior systems and set forth the advantages

of the inventive systems. A41–43 (3:30–5:29 (disadvantages), 6:10–42, 7:4–5 (advantages)). These allegations must be taken as true on a motion for judgment on the pleadings, and the district court erred by substituting its own judgment in place of them.

### **CONCLUSION**

For the foregoing reasons, Morsa respectfully requests that this Court reverse the district court's order granting judgment on the pleadings in favor of Facebook.

Respectfully submitted,

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214-601-5390

Dated: April 20, 2015

/s/ Patrick J. Conroy

214-785-6670

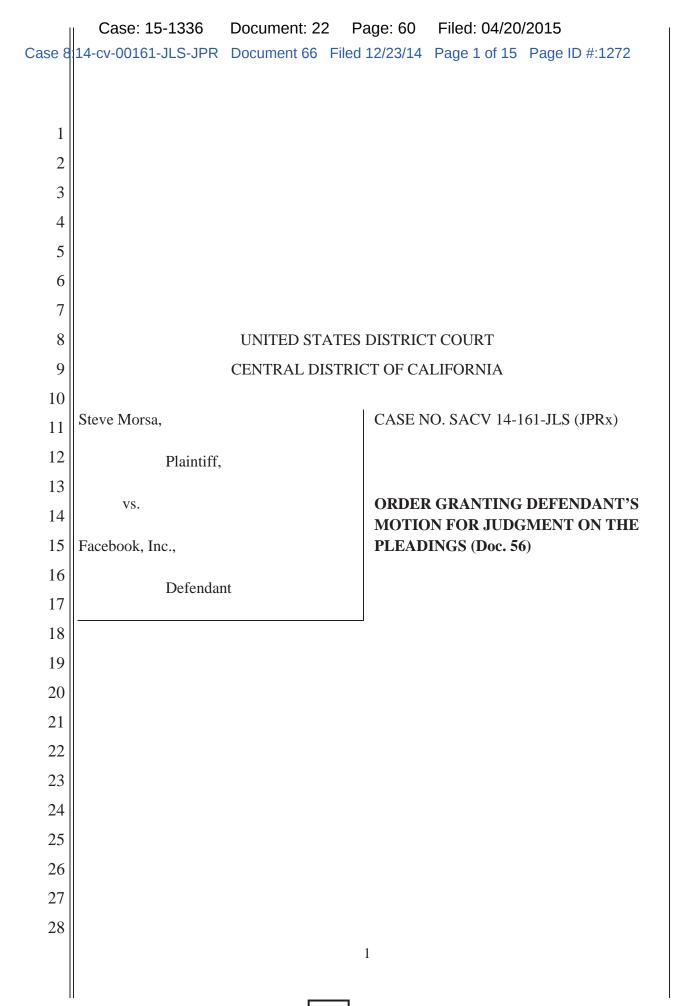
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### **ADDENDUM**

### **ADDENDUM TABLE OF CONTENTS**

File Date	Docket	Description	Page
	No.		No.
12/23/2014	066	Order Granting Defendant's Motion for	A1
		Judgment on the Pleadings	
01/05/2015	068	Judgment	A16
		U.S. Patent 7,904,337	A29
		U.S. Patent 8,341,020	A70



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#### I. <u>INTRODUCTION</u>

Before the Court is a Motion for Judgment on the Pleadings filed by Defendant Facebook, Inc. (Mot., Doc. 56.) Plaintiff Steve Morsa opposed, and Facebook replied. (Opp., Doc. 59; Reply, Doc. 62.) Having read and considered the papers and heard oral argument, the Court GRANTS the Motion.

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#### II. BACKGROUND

On February 4, 2014, Plaintiff Steve Morsa filed a Complaint in this Court against Defendant Facebook, Inc., alleging Facebook has infringed and continues to infringe two of his patents. (Compl., Doc. 1,  $\P$  7.)

Both patents are titled "Match Engine Marketing" and share a common abstract, which reads in relevant part:

Enabling advertisers using a computer network such as the Internet and a match engine to submit their offerings to product, service, benefit seeking entities. . . . An advertiser influences a position of an offering in the advertiser's account by first selecting offering relevant criteria. The advertiser enters the criteria and the description into a listing; influencing at least in part the position for the listing within a results page through an online bidding process. This results page is generated in response to a seeking entity query of the match engine. Pay for performance demographic, geographic, psychographic criteria/characteristics targeted directly

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(Id. Exs. A-B.)

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The specifications, which are largely identical, state that the patents improve on prevailing internet advertising practices, which largely "follow[ed] traditional advertising paradigms" at the time of invention – for instance, through the use of billboard-like banner

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advertising . . . is enabled.

 $^1$  The patents are U.S. Patent Nos. 7,904,337 (hereinafter, "the '337 Patent") and 8,341,020 (hereinafter, "the '020 Patent"). (Compl. ¶¶ 7, 12-16, 17-21; *id.* Exs. A-B.)

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advertisements atop webpages – rather than "utiliz[ing] the unique attributes of the Internet." ('337 Patent, col. 2:19-20.) The patents permit advertisers to target online advertisements only to those consumers fitting desired demographic, geographic and "psychographic" criteria. (*Id.*, col. 6:34-38.) Advertisers reach these consumers by bidding for the display and placement of their advertisements. (*Id.*, col. 6:29-33.)

The five asserted independent claims illustrate the forms this concept takes. Claim 12 of the '337 Patent reads:

A method of generating an advertising presentation using at least in part a computer-compatible network, comprising:

maintaining a database including a plurality of advertisements, wherein each advertisement is associated with a provider and a modifiable bid amount that is independent of other component(s) of the advertisement, each advertisement being searchable;

identifying the advertisement(s) having demographic and/or psychographic and/or firmographic criteria which generate at least a partial match with an entity;

arranging the identified advertisement(s) into said advertising presentation at least in part in accordance with the values of the respective bid amounts for the identified advertisement(s).

(*Id.*, col. 40:23-37.) Claims 113 and 126 of the '337 Patent are substantially similar. Claim 113 reads:

A method of presenting an advertisement, the method comprising:

associating one or more multigraphic and/or firmographic attributes with an advertisement;

receiving input from a user, wherein the received input comprises one or more multigraphic and/or firmographic attributes;

identifying at least a partial match between the multigraphic and/or firmographic attribute or attributes associated with the advertisement and the received input;

and presenting the advertisement to the user;

wherein the determination of the presentation order and/or size of and/or dimensions of and/or location of the advertisement is based at least in part on a bid on at least one of the said multigraphic and/or firmographic attributes.

(Id., col. 50:40-51; see also id. col. 51:29-39.) Claim 1 of the '020 Patent reads:

#### A method comprising:

receiving through a network from a first device connected to the network information associating one or more demographic and/or psychographic and/or firmographic criteria with an ad;

receiving through the network from the first device or a second device connected to the network a bid associated with the criteria;

determining, by at least one processor, ad placement based at least in part on (i) the bid and (ii) ad performance and/or ad popularity.

('020 Patent, col. 39:31-41.) Finally, Claim 97 of the '020 Patent reads:

#### A method comprising:

auctioning or bidding on or for, through a network via at least one device connected to the network, a(n):

ad, entity, user, seeker, or entity criteria; determining, by at least one processor, ad placement;

wherein one or more demographic and/or psychographic and/or firmographic criteria is associated with, a component of, a factor applicable to, or which corresponds to said ad, entity, user, seeker, or entity criteria.

(*Id.*, col. 45:6-14.) The fifteen asserted dependent claims recite various limitations on the above independent claims. (*See*, *e.g.*, Decl. of Elizabeth L. Stameshkin, Doc. 58, Appx. A.)

On November 13, 2014, Facebook filed the instant Motion for Judgment on the Pleadings, arguing that all asserted claims are drawn to patent-ineligible subject matter under Section 101 of the Patent Act, 35 U.S.C. § 101. (Mem., Doc. 57, at 1-2.) Morsa

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disputes this and additionally argues that (1) subject-matter invalidity under Section 101 is not a defense to an infringement claim and (2) to the extent that it is, it is premature at the Motion for Judgment on the Pleadings stage. (Opp. at 7-19; 19-20; 5-7.)

#### III. LEGAL STANDARD

#### A. Motion for Judgment on the Pleadings

Where a motion for judgment on the pleadings under Federal Rule of Civil Procedure ("Rule") 12(c) is used to dismiss an action for failure to state a claim, it is "functionally equivalent" to a motion to dismiss under Rule 12(b)(6), and the same legal standard applies to both motions. *Harris v. County of Orange*, 682 F.3d 1126, 1131 (9th Cir. 2012). Judgment on the pleadings is appropriate only "when the moving party clearly establishes on the face of the pleadings that no material issue of fact remains to be resolved and that it is entitled to judgment as a matter of law." *Enron Oil Trading & Transp. Co. v. Walbrook Ins. Co.*, 132 F.3d 526, 529 (9th Cir. 1997) (internal quotation marks and citation omitted).

Dismissal of a complaint for failure to state a claim is not proper where a plaintiff has alleged "sufficient factual matter, accepted as true, 'to state a claim to relief that is plausible on its face." *Aschcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). "A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 556 U.S. at 678 (citing *Twombly*, 550 U.S. at 556).

When evaluating a Rule 12(b)(6) motion, the Court must accept as true all factual allegations in the complaint and draw all inferences in the non-moving party's favor. *See Seven Arts Filmed Entm't Ltd. v. Content Media Corp. PLC*, 733 F.3d 1251, 1254 (9th Cir. 2013); *Association for L.A. Deputy Sheriffs v. County of L.A.*, 648 F.3d 986, 991 (9th Cir. 2011). The Court is not required, however, to accept legal conclusions couched as factual

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allegations, supported "by mere conclusory statements" and "[t]hreadbare recitals of the elements of a cause of action." *Iqbal*, 556 U.S. at 678.

Unless a court converts a Rule 12(b)(6) or 12(c) motion into a motion for summary judgment, a court generally cannot consider material outside of the complaint (e.g., facts presented in briefs, affidavits, or discovery materials). *In re American Cont'l Corp./Lincoln Sav. & Loan Sec. Litig.*, 102 F.3d 1524, 1537 (9th Cir. 1996), *rev'd on other grounds sub nom Lexecon, Inc. v. Milberg Weiss Bershad Hynes & Lerach*, 523 U.S. 26 (1998). A court may, however, consider exhibits submitted with or alleged in the complaint and matters that may be judicially noticed pursuant to Federal Rule of Evidence 201. *In re Silicon Graphics Inc. Sec. Litig.*, 183 F.3d 970, 986 (9th Cir. 1999); *see also Lee v. City of Los Angeles*, 250 F.3d 668, 689 (9th Cir. 2001).

#### B. Patentable Subject Matter Under 35 U.S.C. § 101

Section 101 of the Patent Act defines the subject matter that is eligible for patent protection: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. This section, however, contains important implicit exceptions. "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Association for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). The concern that drives these exceptions is preemption; laws of nature, natural phenomena, and abstract ideas are "the basic tools of scientific and technological work," and granting patents based on these exceptions might impede innovation more than it would promote it. *Id.* Yet, to some extent "all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Alice*, 134 S. Ct. at 2354 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012)). "Thus, an invention is not

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rendered ineligible for patent simply because it involves an abstract concept." *Alice*, 134 S. Ct. at 2354 (citing *Diamond v. Diehr*, 450 U.S. 175, 187 (1981)).

The Supreme Court has analyzed § 101 by distinguishing "between patents that claim the building[g] block[s] of human ingenuity and those that integrate the building blocks into something more, thereby transform[ing] them into a patent-eligible invention." *Alice*, 134 S. Ct. at 2354 (alterations in original) (internal quotations and citations omitted). In *Mayo*, the Supreme Court set forth a two-step framework for distinguishing between these two types of patents. "First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, '[w]hat else is there in the claims before us?" *Alice*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1296-97). The second step is essentially "a search for an 'inventive concept' – *i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294). The elements of each claim must therefore be considered both individually and "as an ordered combination." *Mayo*, 132 S. Ct. at 1298.

"Issues of patent-eligible subject matter are questions of law." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1369 (Fed. Cir. 2011). In attempting to invalidate a patent on Section 101 grounds, a challenger must overcome the presumption that "every issued patent is presumed to have been issued validly absent clear and convincing evidence to the contrary." *Open Text S.A. v. Alfresco Software Ltd.*, No. 13-CV-4843, 2014 WL 4684429, at \*3 (N.D. Cal. Sept. 19, 2014); *see also State Contracting & Eng'g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1067 (Fed. Cir. 2003) ("A party seeking to establish that particular claims are invalid must overcome the presumption of validity in 35 U.S.C. § 282 by clear and convincing evidence.").

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#### IV. <u>DISCUSSION</u>

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#### A. <u>Ripeness</u>

The parties first dispute whether the validity of the patents-in-suit may properly be decided at this stage of the litigation. (Mem. at 10-12; Opp. at 5-6.)

District courts have "broad discretion concerning the appropriate time to address § 101." Eclipse IP LLC v. McKinley Equip. Corp., No. SACV 14-742-GW(AJWx), 2014 WL 4407592, at \*5 (C.D. Cal. Sept. 4, 2014). It is ordinarily "desirable – and often necessary – to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.), 687 F.3d 1266, 1273-74 (Fed. Cir. 2012). However, there is no "bright line rule requiring district courts to construe claims before determining subject matter eligibility." *Id.* at 1273 (citations omitted); see also Cyberfone Sys., LLC v. CNN Interactive Grp., Inc., 558 Fed. App'x 988, 992 n.1 (Fed. Cir. 2014) ("There is no requirement that the district court engage in claim construction before deciding § 101 eligibility."). Rather, claim construction is a prerequisite to the § 101 inquiry "only where claim construction disputes are relevant." Eclipse IP, 2014 WL 4407592, at \*5; see Lumen View Tech. v. Findthebest.com, Inc., 984 F. Supp. 2d 189, 205 (S.D.N.Y. 2013) (finding claim construction unnecessary for a § 101 analysis because the claims were straightforward, covering broad subject matter categories, and "[n]o components [were] opaque such that claim construction would be necessary to flush out its contours").

Morsa offers two reasons why this Motion is not ripe for decision. First, he argues that both he and Facebook rely on facts outside the pleadings in support of their respective positions and that "factual disputes abound," making this dispute unfit for resolution on the pleadings. (Opp. at 5-6.) The Court agrees that certain matters raised in the briefing are not properly considered at this point in the case. That is a reason to ignore certain contentions in ruling on the Motion; however, it is not a reason to refuse to decide it at all.

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Morsa next argues that while he now asserts twenty claims against Facebook pursuant to the Court's Scheduling Order (Doc. 38), he will add additional claims once discovery is complete, and thus any decision on this Motion would result in "incomplete resolution" of this case. (Opp. at 6.) The deadline for Morsa to elect his asserted claims has long passed, however, and the Court grants leave to add additional claims after that deadline only upon a showing of good cause, which Morsa does not make in his Opposition. (See id.) Moreover, Morsa's argument, taken to its logical conclusion, would preclude the Court from ever considering a Motion to Dismiss or Motion for Judgment on the Pleadings, given that a Plaintiff could always seek the Court's leave to assert new claims before trial.

Accordingly, the Court does not find this Motion is premature.

#### B. Section 101 as a Defense

The parties next dispute whether patent-ineligibility may be raised as a defense to infringement. (Opp. at 19-20; Reply at 10-11.)

Morsa argues that Facebook may not seek to dismiss his Complaint on Section 101 grounds because Section 282 of the Patent Act sets forth the available defenses to a claim of infringement, and Section 101 is not listed therein. (Opp. at 19.) As Facebook notes, however, the Federal Circuit has squarely rejected this argument. *See, e.g., Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1331 n.3 (Fed. Cir. 2012) (holding that the defenses enumerated in Section 282 include those set forth in Section 101).

Accordingly, Facebook may raise subject-matter ineligibility as a defense to Morsa's claim of infringement.

#### C. Subject Matter Eligibility

#### 1. Abstract Idea

As noted above, the first step in the Court's Section 101 analysis is determining

whether the claims at issue are directed to a "patent-ineligible concept." *Mayo*, 132 S. Ct. at 1296-97. Such concepts include "laws of nature, natural phenomena, and abstract ideas . . . ." *Alice*, 134 S. Ct. at 2354.

Facebook argues the asserted claims are directed to two abstract ideas: (1) determining the advertisement that will be shown to a consumer based on that consumer's demographic information; and (2) using advertiser bids to determine whether and how an advertisement will be displayed. (Mem. at 2-3.) In response, Morsa does not suggest a different concept for the claims, but instead argues that the claims of the '337 Patent "bear[] none of the hallmarks of abstract ideas," and that the claims of the '020 Patent are even less abstract because they contain additional limitations not found in the '337 Patent claims. (Opp. at 9, 14.)

Facebook's argument is persuasive. The above claims make clear that the purpose of the patents is to (1) target advertisements to certain internet users based on their characteristics and (2) permit advertisers to bid to have their ads shown to those users based on those characteristics. The specification confirms that these are the patents' twin aims:

The present invention is unique in that never before has there been an entity demographic, geographic, psychographic criteria targeted pay-for-performance system which allows product, service, and benefit provider/advertiser/promoters to pay for the exposure of their offerings to their desired targeted entities/marketplace(s) in real or substantially real time via a computer network.

('337 Patent, col. 9:46-55.)

Morsa argues that even if Facebook accurately captures the patents' concept, it fails to demonstrate that it is a "fundamental, long-standing, well-known concept" that is ineligible under Section 101. (Opp. at 13). There are two problems with this argument. First, targeted advertising is just such a concept, insofar as matching consumers with a

given product or service "has been practiced as long as markets have been in operation." *Tuxis Technologies, LLC v. Amazon.com, Inc.*, No. CV 13-1771-RGA, 2014 WL 4382446, at \*5 (D. Del. Sept. 3, 2014); *see also OpenTV Inc. v. Netflix Inc.*, No. 14-CV-01525-RS, at 10 (N.D. Cal. December 16, 2014) ("The concept of gathering information about one's intended market and attempting to customize the information then provided is as old as the saying, 'know your audience.'). Morsa does not attempt to dispute that advertisers targeted consumers based on their demographic data long before the internet existed – for instance, by directly mailing consumers in an affluent zip code.

Similarly, advertisers have long "placed bids," in effect, that determine whether and how their advertisements will be displayed, for instance, by paying more to be featured more prominently on a newspaper page. (Mem. at 16.) The specification is again instructive on this point, positing that the patents' bidding process "applies market principles to [customer] matching on the Internet." ('337 Patent, col. 7:66-67.) Thus, Morsa misses the mark in suggesting that Facebook has not identified any "long-standing, well-known concepts" to which the claims are drawn.

Moreover, Morsa fails to recognize that while a claim's implementation of a "fundamental, long-standing, well-known concept" is highly relevant to the Court's abstractness inquiry, it is not dispositive. The dispositive inquiry is whether the concept to which a claim is drawn has "no particular concrete or tangible form." *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). Here, there can be no doubt that this is the case. In *Ultramercial*, for instance, the Federal Circuit considered claims that, like the claims at issue in this case, concerned online advertising. Specifically, the claims described the following steps:

(1) receiving copyrighted media from a content provider; (2) selecting an ad after consulting an activity log to determine whether the ad has been played less than a certain number of times; (3) offering the media for sale on the Internet; (4) restricting public access to the media; (5) offering the media to the consumer in exchange for watching the selected ad; (6) receiving a

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request to view the ad from the consumer; (7) facilitating display of the ad; (8) allowing the consumer access to the media; (9) allowing the consumer access to the media if the ad is interactive; (10) updating the activity log; and (11) receiving payment from the sponsor of the ad.

Id. at 714-15. The Court found the above steps "recite[d] an abstraction – an idea, having no particular concrete or tangible form," namely that of "showing an advertisement before delivering free content." Id. at 715. And while certain additional limitations such as consulting an activity log added particularity to the claims, the Court found that they did nothing to change the underlying *idea*.

That conclusion controls this case. As in *Ultramercial*, the claims here are drawn to two abstract ideas: targeting advertisements to certain consumers, and using a bidding system to determine when and how advertisements will be displayed. While both of these are "fundamental, long-standing, well-known concepts," they also have "no particular concrete or tangible form" and are therefore abstract. While Morsa argues the dependent claims add various limitations that prevent them from "monopoliz[ing] the alleged abstract ideas" identified by Facebook (Opp. at 16-17), these limitations do not alter the claims' underlying concept in any meaningful way. If they are relevant, then, it is only at the next step in the Court's invalidity analysis. See Ultramercial, 772 F.3d at 715.

Morsa's remaining arguments are without merit. Morsa suggests that the Court should view Facebook's arguments as to the claims' abstractness with "extreme skepticism" in light of allegedly contrary positions Facebook has taken before the Patent Office with respect to patents not at issue in this case. (Opp. at 9-11.) Even accepting this as true, however, Facebook's contrary arguments before another tribunal do not permit this Court to confer patent eligibility on otherwise ineligible subject matter. Cf. McRO, Inc. v. Namco Bandai Games Am., Inc., No. CV 12-10322-GW FFMX, 2014 WL 4749601, at \*7 (C.D. Cal. Sept. 22, 2014).

Morsa also argues that the logic advanced by Facebook, applied consistently, would mean that "all software is necessarily directed to an abstract idea." (Opp. at 11.) While

courts are grappling with *Alice*'s implications on this point, this concern is most acute where a claim presents "a unique computing solution that addresses a unique computing problem." *California Inst. of Tech. v. Hughes Commc'ns Inc.*, --- F. Supp. 3d ---, 2014 WL 5661290, at \*20 (C.D. Cal. Nov. 3, 2014). It is not implicated where, as here, claims recite only the use of a generic computer to implement abstract ideas. *See* Section

IV(C)(2), infra.

Thus, having found the claims at issue in this case abstract, the Court moves on to the second step of its *Mayo* analysis.

#### 2. <u>Inventive Concept</u>

In the second step, the Court considers whether the challenged claims contain an "inventive concept' – *i.e.*, an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S. Ct. at 2355 (alteration in original) (quoting *Mayo*, 132 S. Ct. at 1294). This inventive concept ensures "that the [claim] is more than a drafting effort designed to monopolize the [abstract idea]." *Mayo*, 132 S. Ct. at 1297. Thus, an inventive concept requires that the claim do "more than simply stat[ing] the [abstract idea] while adding the words 'apply it." *Id.* at 1294.

Facebook argues the claims at issue contain no inventive concept because they simply implement the above abstract concepts through the generic computer elements. (Mem. at 18-20.) In response, Morsa argues that the claims' inventive concept arises not from their implementation on the computer, but because the claims *themselves* reflect an inventive concept. (Opp. at 16.)

As for Facebook's argument, it is worth noting that some of the claims contain no computer element of any kind. (*See* claims 113, 118, and 119 of the '337 Patent.) Even those that do, however, speak only of generic computer elements such as "processor electronics configured to perform operations." ('337 Patent, col. 51:29-31.) As Morsa

implicitly acknowledges, these recitations do not lift otherwise ineligible claims to safety. *See*, *e.g.*, *Bancorp Servs.*, 687 F.3d at 1278 ("To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention . . ."); *SiRF Tech.*, *Inc.* v. *Int'l Trade Comm'n*, 601 F.3d 1319, 1333 (Fed.Cir.2010) ("In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, i.e., through the utilization of a computer for performing calculations.")

Morsa instead contends that the claims *themselves* contain inventive concepts through their various limitations. As to the '337 Patent, Morsa cites the following features as limiting the patents' monopolization of their abstract ideas and thereby saving them from ineligibility: targeting customers based on demographic criteria; requiring the bid amount to be "modifiable"; making the advertisements "searchable"; requiring the user to be the source of the demographic information; altering the display of the advertisement in various ways; and using "negative" criteria to determine not to present an advertisement to a given user. (Opp. at 16-17.) As to the '020 Patent, Morsa points to limitations such as: altering a given advertisement's display based on its "performance and/or . . . popularity"; requiring the advertisements to be delivered to users in a specific geographic location or on a specific wireless device; dictating that the advertisements be delivered via video or audio; and collecting user data in various ways. (*Id.* at 17-18.)

These limitations are not nearly as significant as Morsa suggests. Targeting customers based on demographic or geographic criteria is an abstract concept, as discussed above in the first step of the Court's *Mayo* analysis. Whether the information originates with the customer or is used on a "negative" basis does not change that. *See In re Grams*, 888 F.2d 835, 840 (Fed. Cir. 1989) (noting that data-gathering steps cannot make an otherwise nonstatutory claim statutory) (citations omitted). Nor does the Court apprehend how slight – and extremely general – modifications to the bidding process or method of

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displaying the advertisements prevent the claims from monopolizing their underlying abstract ideas. *Cf. Bilski v. Kappos*, 561 U.S. 593, 610-11 (2010) ("[P]atenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or adding 'insignificant postsolution activity.'") (citations omitted). Indeed, the Supreme Court has squarely held that where claims drawn to an abstract concept are limited solely through the use of "conventional steps, specified at a high level of generality," those limitations are insufficient to supply an inventive concept to otherwise abstract claims. *Mayo*, 132 S. Ct. at 1300. That holding controls here.

In sum, the asserted claims are drawn to the abstract ideas of (1) displaying advertisements to consumers based on their demographic information, and (2) permitting advertisers to bid on whether and how their advertisements will be displayed. Moreover, the Court apprehends no "inventive concept" that would "ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice*, 134 S. Ct. at 2355 (alteration in original) (quotation marks and citation omitted). Accordingly, the asserted claims are drawn to patent-ineligible subject matter and are invalid under Section 101 of the Patent Act.

# V. <u>CONCLUSION</u>

For the foregoing reasons, the Court GRANTS the Motion for Judgment on the Pleadings. Facebook shall submit a proposed judgment forthwith.

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DATED: December 23, 2014

JOSEPHINE L. STATON UNITED STATES DISTRICT JUDGE

Case \$:14-cv-00161-JLS-JPR Document 68 Filed 01/05/15 Page 1 of 2 Page ID #:1291 JS-6 UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA Case No. SACV 14-161-JLS (JPRx) STEVE MORSA, Plaintiff, **JUDGMENT** v. FACEBOOK, INC. Defendant. 

Case \$:14-cv-00161-JLS-JPR Document 68 Filed 01/05/15 Page 2 of 2 Page ID #:1292

1	WHEREAS on February 4, 2014, plaintiff Steve Morsa filed the Complaint				
2	in the present action (Doc. 1);				
3	WHEREAS on November 13, 2014, defendant Facebook, Inc. filed a				
4	Motion for Judgment on the Pleadings Under 35 U.S.C. § 101 (Doc. 56);				
5	WHEREAS the Court held oral argument on December 19, 2014; and				
6	WHEREAS by order dated December 23, 2014, the Court granted				
7	Facebook's motion (Doc. 66)				
8					
9	<b>THEREFORE</b> , in accordance with the Court's order of December 23, 2014				
10	finding the asserted claims invalid under 35 U.S.C. § 101, IT IS HEREBY				
11	ORDERED, ADJUDGED, AND DECREED THAT judgment is hereby entered				
12	in favor of Facebook and against Morsa, with Morsa to take nothing by way of his				
13	claims.				
14					
15	11.41				
16	Joseph Oll				
17	DATED: January 5, 2015  HON. JOSEPHINE L. STATON				
18	UNITED STATES DISTRICT JUDGE				
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US007904337B2

# (12) United States Patent Morsa

(10) Patent No.: US 7,904,337 B2
(45) Date of Patent: Mar. 8, 2011

#### (54) MATCH ENGINE MARKETING

(76) Inventor: Steve Morsa, Thousand Oaks, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 1415 days.

(21) Appl. No.: 11/250,908

(22) Filed: Oct. 13, 2005

### (65) Prior Publication Data

US 2006/0085408 A1 Apr. 20, 2006 US 2010/0049695 A2 Feb. 25, 2010

### Related U.S. Application Data

(60) Provisional application No. 60/619,987, filed on Oct. 19, 2004.

(51) Int. Cl. G06Q 30/00 (2006.01) G06Q 10/00 (2006.01)

(52) U.S. Cl. ...... 705/14.71; 705/1.1

See application file for complete search history.

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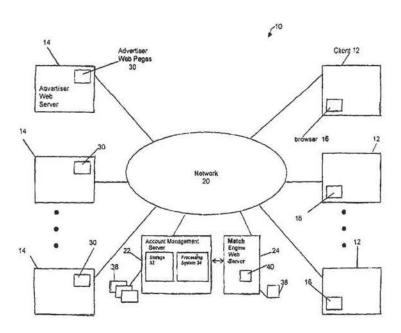
<sup>\*</sup> cited by examiner

Primary Examiner - Jonathan Ouellette

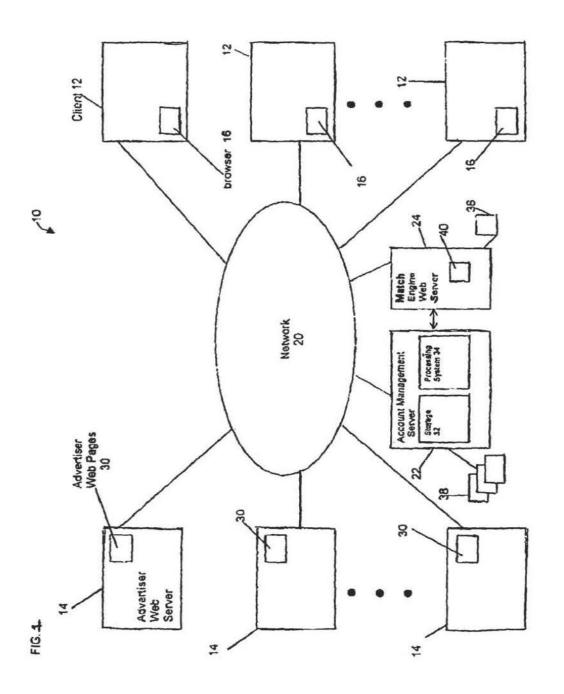
#### (57) ABSTRACT

Enabling advertisers using a computer network such as the Internet and a match engine to submit their offerings to product, service, benefit seeking entities. In some embodiments, a database having accounts for the providers is made available. Accounts contain contact and billing information for an advertiser; and at least one offering having at least a description, a criteria set comprising one or more criterion factors, and a bid amount. An advertiser influences a position of an offering in the advertiser's account by first selecting offering relevant criteria. The advertiser enters the criteria and the description into a listing; influencing at least in part the position for the listing within a results page through an online bidding process. This results page is generated in response to a seeking entity query of the match engine. Pay for performance demographic, geographic, psychographic criteria/ characteristics targeted directly advertising (frictionless advertising) is enabled.

# 229 Claims, 10 Drawing Sheets



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U.S. Patent

Mar. 8, 2011

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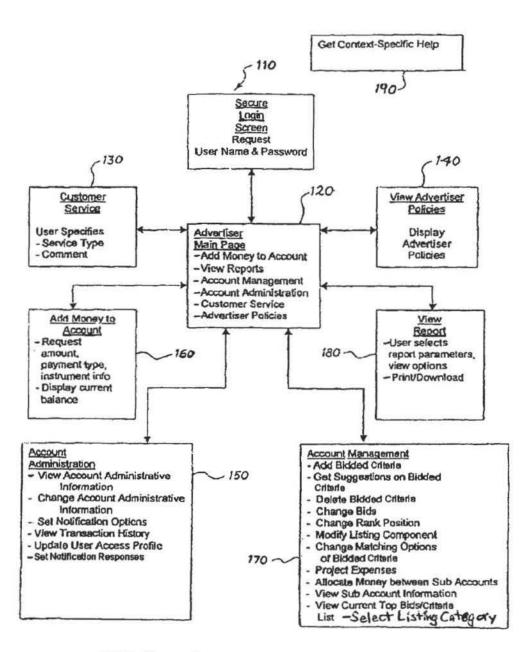
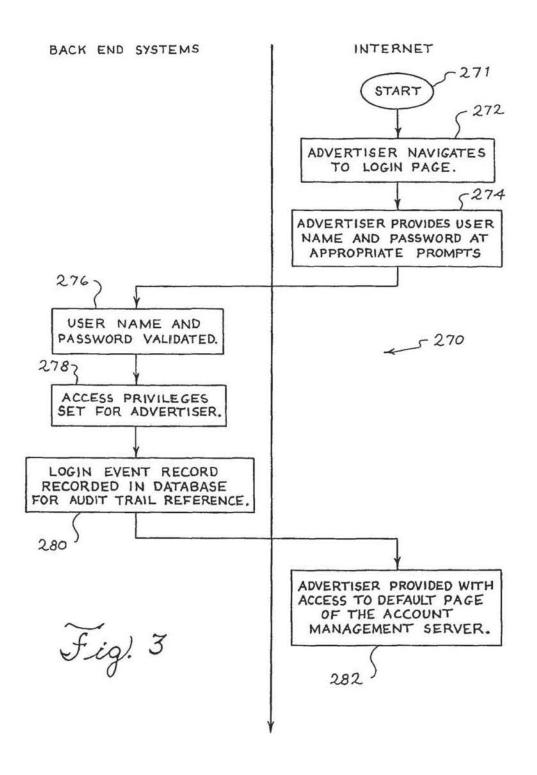


FIG. 2

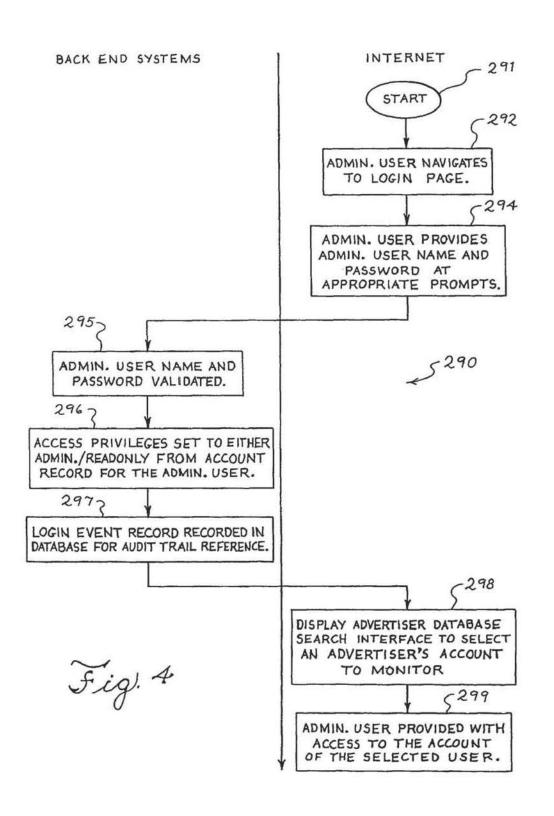
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U.S. Patent

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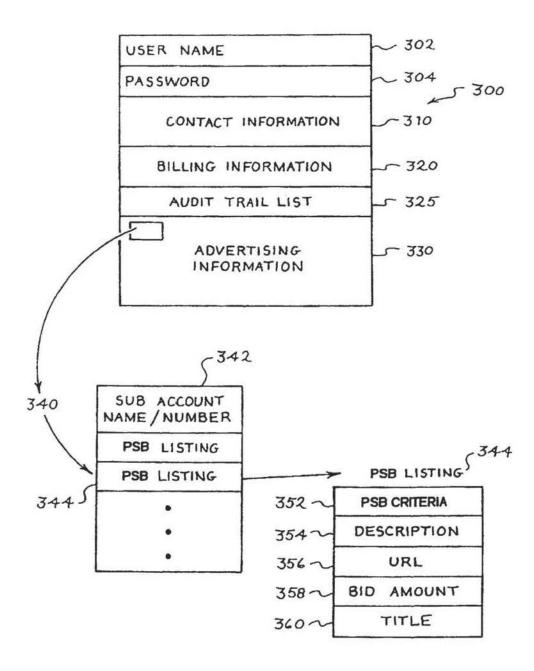
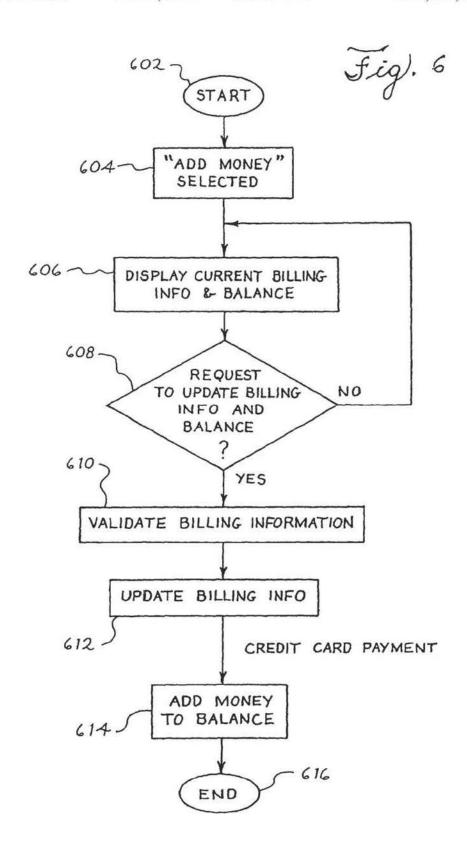


FIG.5

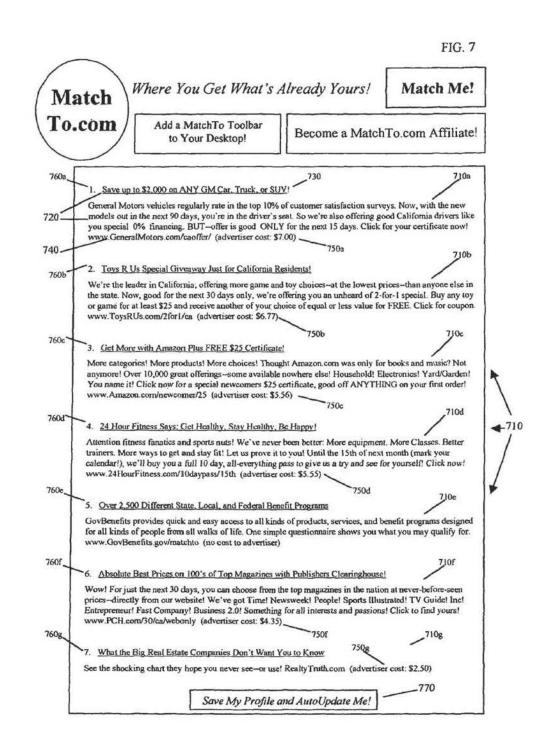
U.S. Patent Mar. 8, 2011 Sheet 6 of 10 US 7,904,337 B2



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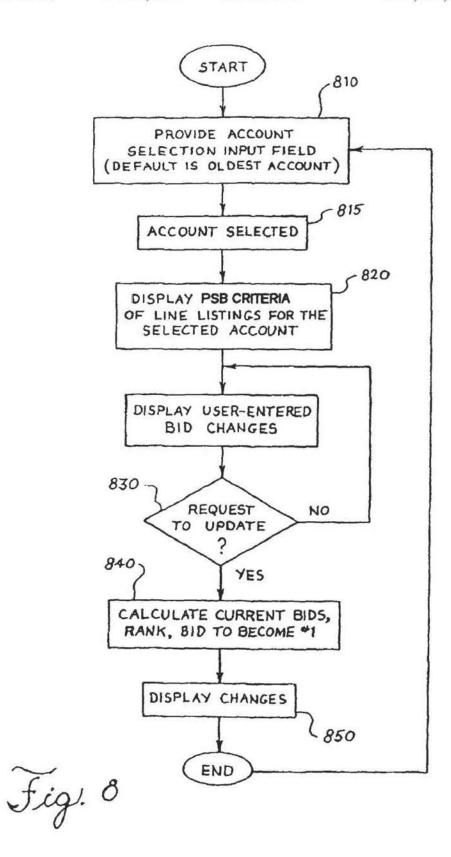
Sheet 7 of 10



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U.S. Patent

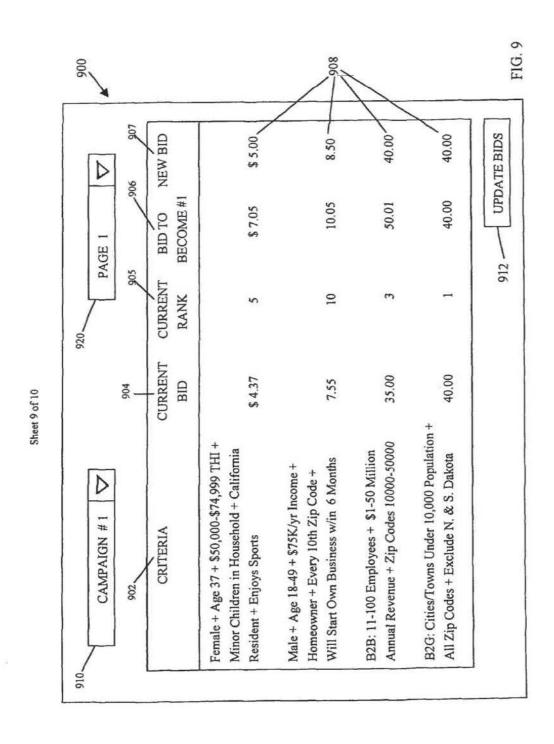
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Here's Your	Official Match Me	Questionnaire!
	Benefits specially designed and a	List of up to 100's of Commercial an available just for you and folks like you here. Prepare to be nicely surprised!
Date of Birth: Marital S	tatus: SingleMarriedDivorce	ced _ Separated _ Sex: M_F_
Do You: Own Home Rent/Lease	In what city/town do you live	State: (2-letter)
Zip Code: Children Living a	t Home (Y/N): If yes, please li	st ages of each:,,,,
Your annual income is: Under \$20, \$75,000-\$99,999\$100,000-	.000\$20,001-\$29,999\$30 \$149,999\$150,000-\$199,99	0,000-\$49,999\$50,000-\$74,999 9\$200,000 & over
How many people, including yourself,	are in your household? How	v many years at current address?
Are you (check all that apply):Hor Working from a home office?I	nemaker? Retired? Student n the Military? A Federal, State	??Self Employed/Business Owner? e, County, or City/Town employee?
Occupation (check all that apply):IUpper Management/Executive	Professional/Technical Tradesn Middle Management Sales/Ma	nan/Machine Operator/Laborer rketing Clerical/Service Worker
Education level (Y/N): Completed	i College Completed High So	chool Completed Grad School
Do you own stocks, bonds, mutual fur	nds, or investment real estate?(	Y/N) If no, would you like to?
What are the two newest cars in your I	household? Car #1: Make	ModelYear
(ear Car #2: Make	Model	Year
Are they (Y/N): Car #1: Leased F	inanced Car #2: Leased Fir	nanced
Credit cards used regularly (Y/N):	AM/EX/Diners Master Card/V	isa/Discover _ Dept Store/Gas/etc
Which of the following do you plan to Have a baby? Buy a house/cc Buy/Lease a used vehicle? B Take a cruise? Travel to anot	ondo/co-op? Remodel a home uy a personal computer? Move	e?Buy/Lease a new vehicle? e to a new city, town, state, country?
	tis Heart/Circulation H	e? (check all that apply):Asthma igh Blood Pressure Headaches
Golf Physical Fitness/Exercise _ Camping/RVing Gardening Sewing/Crafts Hunting/Shooting to you have pets? Please list number a	_ Running/Jogging Snow Skii Fishing Cooking Listen to g Antiques/Fine Art TV/Ra nd types:	Music Reading Vacationing adio Photography Other(s)
our political affiliation?(check one):	_ Republican _ Democrat _ Inc	dependent _Other _ Decline to state
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# 1

### MATCH ENGINE MARKETING

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority benefit from U.S. Provisional Application No. 60/619,987, entitled MATCH ENGINE MARKETING: SYSTEM AND METHOD FOR INFLUENCING POSITIONS ON PRODUCT/SERVICE/BENEFIT RESULT LISTS GENERATED BY A COMPUTER NETWORK MATCH ENGINE, filed on Oct. 19, 2004; naming Steve Morsa as inventor. The entirety of such provisional patent application is incorporated by reference herein.

STATEMENT REGARDING FEDERALLY SPONSERED RESEARCH OR DEVELOPMENT

Not Applicable

SEQUENCE LISTING OR PROGRAM

Not Applicable

REFERENCE TO A MICROFICHE APPENDIX

Not Applicable

#### TRADEMARK REFERENCE

MATCH ENGINE MARKETING and PAID MATCH are trademarks of the inventor. All rights reserved.

#### COPYRIGHT NOTICE

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#### ABSTRACT NOTICE

As it is an abstract only and therefore in no way exhaustive of the present inventions numerous possible forms and embodiments, it is to be understood that the present inventions Abstract is not intended to, and should accordingly not be used to, either limit the scope of the claims or to limit the invention to any particular embodiment(s) or to (a) precise form(s).

#### TECHNICAL FIELD

This invention relates generally to the field of advertising, and in particular to the field of matching advertisers with entities via computer networks.

# BACKGROUND OF THE INVENTION

The transfer of information over computer networks has become an increasingly important means by which institutions, corporations, and individuals do business. Computer networks have grown over the years from independent and 65 isolated entities established to serve the needs of a single group into vast internets which interconnect disparate physi2

cal networks and allow them to function as a coordinated system. Currently, the largest computer network in existence is the Internet. The Internet is a worldwide interconnection of computer networks that communicate using a common protocol. Millions of computers, from low end personal computers to high end super computers, are connected to the Internet.

The Internet has emerged as a large community of electronically connected users located around the world who readily and regularly exchange significant amounts of information. The Internet continues to serve its original purposes of providing for access to and exchange of information among government agencies, laboratories, and universities for research and education. In addition, the Internet has evolved to serve a variety of interests and forums that extend beyond its original goals. In particular, the Internet is rapidly transforming into a global electronic marketplace of goods and services as well as of ideas and information.

Current paradigms for generating web site traffic, such as banner advertising, follow traditional advertising paradigms and fail to utilize the unique attributes of the Internet. In the banner advertising model, web site promoters seeking to promote and increase their web exposure often purchase space on the pages of popular commercial web sites. The web site promoters usually fill this space with a colorful graphic, 25 known as a banner, advertising their own web site. The banner may act a hyperlink a visitor may click on to access the site. Like traditional advertising, banner advertising on the Internet is typically priced on an impression basis with advertisers paying for exposures to potential consumers. Banners may be displayed at every page access, or, on search engines, may be targeted to search terms. Nonetheless, impression-based advertising inefficiently exploits the Internet's direct marketing potential, as the click-through rate, the rate of consumer visits a banner generates to the destination site, may be quite low. Web site promoters are therefore paying for exposure to many consumers who are not interested in the product or service being promoted, as most visitors to a web site seek specific information and may not be interested in the information announced in the banner. Likewise, the banner often fails to reach interested individuals, since the banner is not generally searchable by search engines and the interested persons may not know where on the web to view the banner.

Pay for placement database search systems have been developed in which advertisers bid on the placement of their listings in search results returned to a searcher in response to a world wide web query from a searcher. Each advertiser's listing includes a search term and a bid amount. In some embodiments, each advertiser's listing includes a title, descriptive text and a clickable hyperlink or uniform resource locator (URL). The database of search listings stores many such listings, each associated with an advertiser. Upon receipt of the query, the database is searched and listings having a search term matching the query are formatted for display to the searcher as search results.

The advertisers adjust their bids or bid amounts to control the position at which their search listings are presented in the search results. The pay for placement system places search listings having higher-valued bids higher or closer to the top of the search listings. Other rules may be applied as well when positioning search listings.

For example, a more senior listing may be positioned or ranked higher than a junior listing for the same search term and same bid. Higher-ranked listings are seen by more searchers and are more likely to be clicked, producing traffic of potential customers to an advertiser's web site.

The searcher is presented with search listings based at least in part on the hid amounts. The search listings may extend Case: 15-1336 Document: 22 Page: 89 Filed: 04/20/2015

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over several screens or pages when formatted for viewing. As a result, higher positioned search listings are much more likely to be seen by the searcher. Moreover, some pay for placement systems have affiliate agreements whereby some of their highest-bidded search listings are presented to searchers using other general purpose search engines. Because of these affiliate agreements and similar arrangements, an advertiser's web site, if bid highly enough, may today be seen by as many as seventy-five percent of Internet users.

An advertiser wishing to attract searchers to his web site as potential customers for the advertiser's goods and services thus has an incentive to position his search listing relatively high in the search results. An advertiser may enter bids on many search terms. For search terms which are closely related to the content of the advertiser's web site, the advertiser might place relatively large bids. For less closely related search terms, the advertiser might place smaller bids. A number of strategies have been developed by advertisers to increase traffic to advertiser web sites in this manner.

Similarly, pay for placement search systems have developed tools to help the advertisers manage their bids and attract traffic. Overture Services, Inc., (now a division of Yahoo) operating a system at www.overture.com; and Google, at www.google.com, have presented advertisers with a standard bidding page accessible over the world wide web. The standard bidding page allows an advertiser to log in, display and edit all current search listings and review bids. Today, a number of other competitors including FindWhat also offer such pay for placement systems.

Despite their current popularity, however, such conven- 30 tional pay for placement systems actually have a surprising number of major drawbacks. First, as a result of these systems quickly expanding recognition and use since their development in the late 1990's, combined with their having an effective limit on the number of economically viable search terms 35 upon which advertisers are willing to bid on, such systems growth rate is now predicted to decline precipitously in the years to come. Due to the popularity of and resultant often rabid bidding for the most effective and responsive search terms, many companies-especially smaller ones-are start- 40 ing to drop out of such systems due to this growing lack of affordability. In fact, some experts now believe that in the years to come, as has been the case with broadcast television, only larger companies, often bidding on 100's or even 1,000's of search terms each, will be able to even afford to participate 45 in such systems at all.

Second, as is well known in this "search engine marketing" [SEM] industry, despite these systems best efforts, attempting to match advertisements to search terms is inherently problematic when working within an unstructured environment like the Internet. Because search engines use at least in part impersonal algorithms, link analysis, and other automated methodologies to locate and present search—and advertising—results, the delivery of irrelevant or minimal relevancy advertisements to the searcher is all too common. Indeed, attempting to discern searchers intent from the search terms they use is often characterized as being akin to trying to read their minds.

A third problem with these systems is their inability to identify those many products, services, and benefits the 60 searchers know nothing about yet for which they may—and do—qualify to obtain, use, and benefit from. While knowing ones intent is great (if and when you can discern it), basing (so called) targeted advertising presentations on just that factor shortchanges both entities and the provider/advertisers. With 65 such "targeted by intent only" advertising systems, it's very much a case of "if only you knew how much you don't know."

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A fourth problem is the artificial limit such systems, by their structural nature, place on the number of advertisers who can effectively obtain placement-and therefore visibility of their advertising-based on each search term. People conduct searches because they are looking for information of some type from any web site or source which might have it; and, they are not normally very patient about getting it. Numerous studies have shown that few people will view more that the first two or three pages of search results before either changing the search terms and trying again; or trying their search at one or more of the many other readily available search engines. This means that-because computer screens and therefore web pages are of limited physical/viewable size, there's only a precious few positions of any marketing value for advertisers to bid on if they expect their ads to even be seen by the searcher (or by worthwhile numbers of searchers), much less clicked on and forwarded to the advertisers web site for a potential purchase to take place.

Relatedly, because people conducting searches usually are doing so to quickly gather what they consider to be unbiased (and preferably advertising-free) information, and not to look at a bunch ads; if they don't find the information they're actually looking for in the first few pages, as stated, they don't often stick around scrolling through pages and pages of ads stuck along the side of or amongst what to them is irrelevant content. If they don't quickly see what they're looking for in the first few pages, anything that follows is history—including any remaining ads.

A little talked about fifth problem with search engine marketing systems is "click fraud;" where clicks on the various displayed paid listings are executed either manually or via automated systems (some now very sophisticated in their operation) not due to an interest in the product or service advertised, but in order to inflict financial pain on targeted advertisers (often by their competitors, who are unfortunately able to easily identify the search terms their competition is paying for) and/or in order to gain illegal commissions for the entities (or their agents) perpetrating these frauds. Overseas "click fraud rings" have even recently sprung up to take advantage of this vulnerability. Some estimates place such fraud as high as 10-20% or more of all "hits" on the most valuable search terms and/or within the most competitive industry sectors. Such fraud; considered by many in the field to be far more widespread than is readily admitted to by the providers of such systems; may reportedly be costing many advertisers up to \$100's to 10's of \$1,000's of dollars a month

A sixth problem with such systems is their great difficulty in delivering search results—and therefore advertisers—who are geographically local to individual searchers. While at this time SEM has become a five-billion dollar/year industry, various estimates place the total potential SEM market to be perhaps three-to-five times this amount; if only locally-based vendors were able to target their products and services only to those people within reasonable driving distance of their places of business. It doesn't do "Joe's Plumbing" any good to be one of the paying advertisers on a search term such as "plumbing," when only a minuscule percentage of "plumbing" searchers are within Joe's geographic service area, and therefore able to take advantage of his services.

A seventh problem with SEM systems is their inherently complicated, esoteric nature. While sophisticated product and service providers have—though usually with the assistance of experts in the field—readily embraced these systems, precious few of the many millions of smaller companies and professional practices have done so. Already familiar—and comfortable—with such media as yellow pages, newspapers,

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direct mail; perhaps even radio and TV; they've understandably shown little interest to date in putting complicated SEM (or the related search engine optimization [SEO]) techniques and methodologies to work in their businesses—even as much additional profit doing so could mean to them. The whole complicated Internet advertising business leaves them lost and confused. As the current conventional SEM advertising systems continue to become more and more complicated as the years go on, this small-company/business disconnect only continues to grow worse.

These paid search systems eighth problem is centered around trademark infringement and related intellectual property (IP) issues. An important percentage of the words and phrases targeted by advertisers utilizing SEM systems are actually the legal product, service, and business-name trade- 15 marks of many 100's to 1,000's of companies around the world who are for the most part understandingly very displeased and "up in arms" over the use of their intellectual property by competitors and others profiting from their wellknown creations. Though recent indications are that this issue 20 may be reaching a conclusion and resolution generally favorable to those providing and utilizing such SEM systems within the US; as recently illustrated by the French court decision against one of the world's largest paid search providers, such favorable outcomes may be few and far between 25 when it comes to other countries; most of which regularly demonstrate a greater propensity for "protecting" their established companies against real or perceived interlopers and "outsiders" than does the US.

Thus, search engine marketing (SEM) and other traditional 30 paradigms of advertising fail both to provide maximized results to 10's of millions of businesses/advertisers, while further failing to deliver the up to 100's of little- or un-known yet valuable and useful, relevant, targeted product, service, and benefit opportunities and information to interested parties in a cost-effective manner. Internet advertising done right can offer a level of targetability, interactivity, measurability, and competitive privacy not generally available from other media. With the proper tools, technologies, and methodologies; Internet advertisers have the ability to quickly, easily, affordably, and confidentially target their messages to specific groups of consumers and receive prompt feedback as to the effectiveness of their advertising campaigns.

Ideally, web site promoters should be able to control their placement in match result listings so that their listings are 45 prominent in match requests that are relevant to the content of their web site and/or their offerings. The match engine functionality of the Internet (i.e. GovBenefits.gov and BenefitsCheckUp.org) needs to be focused in a new direction to facilitate an on-line marketplace which offers consumers and 50 other entities quick, easy and relevant match results while providing Internet advertisers and promoters of all sizes and revenues with a cost-effective way to target consumers. A consumer utilizing a match engine that facilitates this on-line marketplace will find companies, businesses, government 55 and non-profit agencies, etc that offer the products, services, benefits and information that the consumer is seeking. In this on-line marketplace, companies selling or offering products, services, benefits, or information bid in an open auction environment for positions on a match result list generated by an 60 Internet match engine.

Since advertisers must pay for each click-through referral generated through the match result lists generated by the match engine, advertisers have in incentive to select and bid on those match criteria (characteristics) which are most relevant to their web site and offerings. The higher an advertiser's position on a match result list, the higher likelihood of a

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"referral;" that is, the higher the likelihood that a consumer will be referred to the advertiser's web site/offerings through the match result list.

Therefore; it would be desirable then to provide a system and method which would readily reduce/mitigate/overcome the many substantial drawbacks, deficiencies, and shortcomings of the present conventional advertising paradigms.

#### ADVANTAGES

Accordingly, the present invention may in one or more of its various embodiments have one or more of the following advantages:

The providing of a more level playing field where individuals, companies, businesses, and professional practices of all types, sizes, industries, and revenues may more quickly, easily, and affordably compete more among and between themselves for customers and clients.

The providing of a system and method where promoters may have their choice of potentially up to millions of different targeted criteria combinations from which to target their offerings to.

The providing of a system and method where up to 100's or more of advertisers at one time may be more effectively and profitably displayed to, viewed by, and have their web sites visited (and/or be otherwise contacted) by these motivated, highly-interested product, service, benefit, and information seekers.

The creation of a new system of advertising where advertisers target the most interested-consumers and entities by participating in a free market which attaches a monetary cost for an advertiser's listing in a match result list generated using advertiser-selected criteria.

The providing to product, service, benefit, and information seeking entities with products, services, benefits, and information individually tailored and specifically targeted to their demographic, geographic, psychographic factors (collectively; multigraphics).

The providing of a system and method where benefit providers may more quickly, easily, and affordably identify potential recipients for whom to present their must-qualify-for-in-order-to-receive benefits and benefit programs.

The providing of a system and method for enabling promoters to influence a position on a match result list generated by a match engine for a specified set of criteria.

The providing of a system and method for enabling promoters to specify criteria to the match engine so as to target their match result list placement to the match queries most relevant to their business/offer.

The providing of a system and method for enabling promoters to examine their current criteria and placement couplings online and to make substantially instantaneous changes to their selected criteria, placements, and web site titles and descriptions.

The providing to promoters a match engine that permits such promoters to influence a higher or lower placement in a match result list via a continuous, competitive online bidding process.

The providing of a cost-effective method of Internet advertising where the web site promoter is charged in direct proportion to the number of actual visits generated by the match engine.

The allowing of a web site promoter to control a title or description associated with the promoters listing in a match result list generated by the match engine.

The providing of a pay-per-click (PPC) system with reduced click fraud and concurrent increased advertiser com-

petitive privacy by making more difficult both the identification of any particular advertiser(s) as well as their advertisement(s).

The reduction and/or possible elimination of the real or perceived need and/or desire of many PPC advertisers to bid on other companies trademarked products and services in order to reach their desired prospects.

The enabling of the identification of products, services, and benefits which are available to an entity yet which entity would otherwise have little or no knowledge of.

The enabling of less sophisticated product and service providers to also make use of Internet based pay-for-performance advertising due to the present invention being a more quickly and easily understood and utilized PPC system.

The enabling of local companies/businesses to more easily pay-for-performance PPC advertise to only those prospects located and/or operating within the geographic areas in which these companies/businesses choose to provide their products and services.

The frictionless advertising disintermediation of traditional advertising vehicles including one or more of the following Newspapers, Magazines, Search engines, Television, Radio, Phone directories, Direct mail, Web sites, Billboards, Insert media (i.e., package inserts; ride alongs, blow-ins); etc. 25

#### SUMMARY OF THE INVENTION

The present invention provides a way for product/service/benefit (and information) providers/advertisers/promoters 30 (hereinafter "advertisers, "providers," or "promoters") using a computer network to influence the positions within a product/service/benefit (hereinafter "PSB") result list (hereinafter "PSB result list" or just "result list") generated by a product/service/benefit (PSB) matching "engine" (hereinafter "match 35 [ing] engine" or just "engine").

More particularly, the present invention relates to a system and method to enable providers/advertisers to select PSB criteria/characteristics (hereinafter "PSB criteria" or "criteria" or "characteristics") relevant (having nexus) to themselves and/or their product(s)/service(s)/benefit(s) (hereinafter "PSBs" or "offerings"); and influence result list positions for their PSB listings (hereinafter "PSB listings" or just "listings") on a match engine result list.

"Entities" shall herein be understood to mean individuals, 45 companies, businesses, non-profits, charities, governments, educational institutions, and families; including any and all other agencies, groups, organizations, enterprises, etc, (of any manner or form); and also including two or more of any of these entities acting together and in concert with one another. 50

In a preferred embodiment, after a PSB seeker (hereinafter "PSB seeker," "entity seeker," or simply "seeker") has completed the requisite seeker questionnaire/survey/profile (hereinafter "questionnaire"), the match engine will generate a results list with each respective providers' listing(s) in position(s) influenced at least in part by at least one criterion (criteria) factor as chosen by each providers. It is to be understood that "criteria," as used herein, includes both the singular (criterion) as well as the plural (criteria); as is common in today's language.

In a preferred embodiment of the present invention, a provider selects one or more of its criteria and influences a position within the results list generated by that criteria by participating in an online competitive bidding process. This online competitive bidding process is known as a "pay only 65 for results" process, "Pay only for results" applies market principles to PSB matching on the Internet, Conventional

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PSB matching engines do not provide a way for providers to easily predict the position of their PSBs in results lists.

A tool enabling providers to target criteria relevant to their business/purpose and to pinpoint the placement of their PSBs within the results provides a powerful advantage to businesses and others seeking to increase the use of their PSBs. Furthermore, a competitive bidding process and pricing based on number of referrals generated helps insure that the pricing structure reflects the market and is accessible to providers of all budget sizes.

To participate in the process, a PSB provider may in a preferred embodiment access the provider's user account through a secure web site. The provider may use the account to place bids on criteria that are relevant to the provider's web site (e.g., it products, services, benefits, information). Each bid is specific to at least one criterion and corresponds to a money amount that the provider will pay to the owner of the matching engine each time a seeker clicks on the provider's hyperlinked listing in the result list generated by the matching engine. The seeker's click will result in an access request being sent to the provider's web site (or, in other embodiments, (an) alternative location(s) of provider's choosing, including one or more product/informational/sales message pages in the event provider doesn't have (a) web site/s or prefers not to use it/them), which will respond by transmitting the provider's web page to the seeker's browser. The charge to the provider for the placement is therefore directly proportional to the benefit received, since the charge is based on the number of referrals to the provider's web site (as stated, and/or other online or offline provider designated location/s) that were generated by the matching engine.

Preferably, the higher the bid, the more advantageous the placement in the result list that is generated when the bidded criteria is entered by a PSB seeker using the engine. The list is arranged in order of decreasing hid amount, with the PSB listing corresponding to the highest bids displayed first to the seeker. Optionally, each PSB listing corresponding to a bid is identified on the display as a paid listing. If so, the bid amount may be included on the identification. In addition, the result list of the present invention is preferably combined with "non-paid" PSB descriptions; e.g. as with the numerous social benefits and other benefit programs provided by various government agencies, educational institutions, non-profit organizations, and the like. The combination of paid and unpaid listings helps ensure that the seeker will receive the most complete and relevant PSB results. Optionally, because the non-paid listings are considered to have a bid amount of zero, such listings may be located following/underneath the paid results.

According to a first embodiment of the present invention, there is provided a system and method for enabling PSB providers to influence a position for a PSB listing within a result list generated by a PSB matching engine. The provider first selects one or more criteria relevant to the PSB(s) to be listed. The provider influences the rank position for each listing through an ongoing online competitive bidding process with other providers. The bidding process occurs when a provider enters a new bid amount for an existing listing or enters a bid amount for a new listing. Preferably, the providerer's bid is then processed in real or near real time. This bid amount is compared with all other bid amounts from other providers for the same criteria, with new rank values being generated for all listings having that criteria.

The rank value determines the position where the provider's web site description (and/or other contact and/or other information) will appear on the results page(s) that is generated once the questionnaire has been submitted to the match-

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ing engine by a PSB seeker. A higher bid will result in a higher rank value and a more advantageous placement, which is preferably near the beginning of the results list page. Though it could be virtually anything of value; preferably, the quantity used in the competitive bidding process is a money amount that the provider will pay to an owner of the matching engine each time the provider's web site is referred by the engine. Preferably, this money amount will be deducted from an account balance that is retained in the provider's account for each time the provider's web site is referred by the engine.

One embodiment of the system and method of the present invention provides a database having accounts for the PSB providers. Each account includes contact and billing information for a provider. In addition, each account includes at least one listing, each listing having preferably (though it 15 could be more or less) five components: a description of the web site (and/or other contact/benefit information) to be listed, the Uniform Resource Locator (URL) of the web site, one or more criterion, a bid amount, and a title for the listing. Each account may also include the provider's payment his- 20 tory and a history of listings entered by the user. The provider logs in to its account via an authentication process running on a preferably secure server. Once logged in, the provider may add, delete, or modify a listing. The functions of adding or deleting a listing, or modifying the bid amount of a listing is 25 to initiate the competitive bidding process described above. All listing changes and modifications are preferably processed substantially in real time to support the online competitive bidding process. Alternatively, the system operator or an entity acting on its behalf may itself set up and manage 30 (automatically and/or manually) an advertising program for a system client e.g., as may be desired by provider/advertisers without a web presence.

In another embodiment, seekers clicks on the providers' listings may resolve not (just) to a web site, but could initiate 35 any number of other commonly known to the arts contact/ information delivery channels e.g., e-mails or instant messages could be sent, letters mailed, pop-ups delivered, commercials initiated, phone calls made, personal visits undertaken, etc. Any such "resolvation(s)" deemed suitable 40 (e.g., by the system administrator and/or by one or more advertisers) for the system of the present invention may be utilized. Note, however, that the architecture for and procedures to implement resolvations is not conventional in the system of the present invention as detailed herein.

The present invention is unique in that never before has there been an entity demographic, geographic, psychographic criteria targeted pay-for-performance system which allows product, service, and benefit provider/advertiser/promoters to pay for the exposure of their offerings to their desired targeted of their entities/marketplace(s) in real or substantially real time via a computer network. Further aspects of the present invention and many additional obvious advantages will become apparent during the course of the following description and by reference to the attached drawings.

As used herein including the claims, the term "benefit(s)" shall be understood to mean any product(s) [including money and monetary equivalents, e.g., vouchers, certificates, coupons, etc] or service(s) with a discounted (including to as little as zero cost) rate or other added value available to a PSB-seeking entity in addition to those product(s) or service(s) otherwise offered to the general set/applicable (of) entity(ies) for which such discounted products or services are designed for and targeted to.

Benefits are therefore themselves products and services; 65 the difference being that "benefits," as used herein, are products and services (including programs) made unique and spe10

cial due to their discounted and/or value-added nature; targeted as they are to some subset of/within one or more entity type. Benefits, unlike usual "available for purchase and/or use by all" products and services, have at least one eligibility/ qualification requirement which absolutely must be met in order for an entity to obtain/use it/them.

Such requirements (criteria/characteristics) may include such factors as where a person lives, how much they earn, size and make-up of family, current/past employment, spending habits, personal property owned (cars, computers, etc), personal interests and desires, etc; number of employees in a business, a company's location, gross revenues, net profit, equipment needs (firmograpics); population of a town, industries present, geographic size, its demographic makeup; student number of an educational facility, its location, courses of study offered, expansion desires; number of people served by a non-profit organization, its targeted constituency, percentage of funds used for operations, etc.

A match engine is, typically, a program (or coordinated set of programs) with related structure (database, interface, etc) able to match entities (individuals, businesses, governments, non-profit organizations, etc) with products, services, and benefits based on the geographic and/or demographic and/or psychographic and/or firmographic criteria/characteristics unique to each entity.

Such a match engine is described in detail in Ser. No. 09/832,440 by the same present inventor, entitled Method and Apparatus for the Furnishing of Benefits Information and Benefits. It is incorporated herein by reference in its entirety.

Other examples of match engines include those provided and administered by the U.S. Dept. of Labor (DOL) and the National Council on the Aging (NCOA); as found at their respective GovBenefits.gov and BenefitsCheckUp.org websites

While there are a number of useful similarities, principle, foundational difference between match engines and (Internet) search engines are that match engines' database(s) consist of an orderly collection of set-format, easily-identified; easily-correlated; easily-manipulated product, service, benefit information from any number of "member" companies and firms. Search engines, on the other hand, utilize algorithms, links, etc to "crawl" the unorganized, unstructured Internet in order to create a huge collection of disparate web (and other) pages of information from sources normally having no nexus of any type with the search engine itself; often in any number of disparate formats; usually gathered from some 100's of millions-or billions-of unrelated sources. Obtaining product, service, and benefit relevancy for system users with a match engine is therefore, unlike with search engines, a goal far more easily obtained.

Criteria (characteristics) are, essentially, the who, what, when, where, why, and how information/data/factors that are a part of/which correspond to all entities of all types; being most commonly of a demographic, geographic, psychographic (collectively; multigraphics), firmographic (generally, for non-human entities, i.e. companies, businesses, commercial enterprises, non-profits and charities, agencies, etc), interest/preference/desire nature.

"Seeker(s)" shall be understood to mean those entities desiring to obtain products, services, and benefits (and/or information concerning such) from the providers of such; and shall include individuals, businesses, and other commercial enterprises, non-profits and charities, governments, educational institutions, agencies, families, groups, organizations, enterprises, and any other entities of any type; including two or more of any of these entities acting together and in concert

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with one another. It is also to be understood that "(in) substantially (in) real time" also includes "in real time."

While in a preferred embodiment the current invention directs itself to combining products AND services AND benefits AND information together for maximum effectiveness, usefulness, and value; in alternative embodiments, it could easily also match entities to ONLY products, ONLY services, ONLY benefits, ONLY information; or to some combination of at least two of these four.

As it is a summary only and therefore in no way exhaustive 10 of the present inventions numerous possible forms and embodiments, it is to be understood that the present inventions Summary is not intended to, and should accordingly not be used to, either limit the scope of the claims or to limit the invention to any particular embodiment(s) or to (a) precise 15 form(s).

#### BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 is a block diagram illustrating the relationship between a large network and one embodiment of the system and method for generating a pay-for-performance Product/ Service/Benefit (PSB) match result of the present invention;

FIG. 2 is a chart of menus, display screens, and input 25 screens used in one embodiment of the present invention;

FIG. 3 is a flow chart illustrating the advertiser user login process performed in one embodiment of the present invention:

FIG. 4 is a flow chart illustrating the administrative user 30 login process performed in one embodiment of the present invention;

FIG. 5 is a diagram of data for an account record for use with one embodiment of the present invention;

FIG. 6 is a flow chart illustrating a method of adding money 35 to an account record used in one embodiment of the present invention:

FIG. 7 illustrates an example of a PSB match result list generated by one embodiment of the present invention;

FIG. 8 is a flow chart illustrating a change bids process used 40 in one embodiment of the present invention;

FIG. 9 illustrates an example in one embodiment of a screen display used in the change bids process of FIG. 8; and FIG. 10 illustrates an example of a seeker questionnaire used in one embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE INVENTION

Methods and systems for generating a pay-for-performance product/service/benefit result determined by a site 50 promoter, such as an advertiser, over a client/server based computer network system are disclosed. The following description is presented to enable any person skilled in the art to make and use the invention. For purposes of explanation, specific nomenclature is set forth to provide a thorough 55 understanding of the present invention. Descriptions of specific applications are provided only as examples. Various modifications to the preferred embodiments will be readily apparent to those skilled in the art, and the general principles defined herein may be applied to other embodiments and 60 applications without departing from the spirit and scope of the invention and its claims.

By way of example and not limitation, those skilled in the art will appreciate that the invention may be practiced with various computer system configurations, including hand-held 65 devices, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs, mini-

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computers, mainframe computers, other types of suitable computing devices, TV set-top boxes, cell phones, and the like

Thus, the present invention is not intended to be limited to the embodiments shown, but is to be accorded the widest scope consistent with the principles and features disclosed herein.

Referring now to the drawings, FIG. 1 is an example of a distributed system 10 configured as client/server architecture used in a preferred embodiment of the present invention. A "client" is a member of a class or group that uses the services of another class or group to which it is not related. In the context of a computer network, such as the Internet, a client is a process (i.e. roughly a program or task) that requests a service which is provided by another process, known as a server program. The client process uses the requested service without having to know any working details about the other server program or the server itself. In networked systems, a client process usually runs on a computer that accesses shared network resources provided by another computer running a corresponding server process. However, it should also be noted that it is possible for the client process and the server process to nm on the same computer.

A "server" is typically a remote computer system that is accessible over a communications medium such as the Internet. The client process may be active in a second computer system, and communicate with the server process over a communications medium that allows multiple clients to take advantage of the information-gathering capabilities of the server. Thus, the server essentially acts as an information provider for a computer network.

The block diagram of FIG. 1 therefore shows a distributed system 10 comprising a plurality of client computers 12, a plurality of advertiser web servers 14, an account management server 22, and a match engine web server 24, all of which are connected to a network 20. The network 20 will be hereinafter generally referred to as the Internet. Although the system and method of the present invention is specifically useful for the Internet, it should be understood that the client computers 12, advertiser web servers 14, account management server 22, and match engine web server 24 may be connected together through one of a number of different types of wired and/or wireless networks. Such networks may include local area networks (LANs), other wide area networks (WANs), and regional networks accessed over telephone lines, cable, wireless; such as commercial information services. The client and server processes may even comprise different programs executing simultaneously on a single

The client computers 12 can be conventional personal computers (PCs), workstations, computer systems, etc. Each client 12 typically includes one or more processors, memories, input/output devices, and a network interface, such as a conventional modem. The advertiser web servers 14, account management server 22, and the match engine web server 24 can be similarly configured. However, advertiser web servers 14, account management server 22, and match engine web server 24 may each include many computers connected by a separate private network. In fact, the network 20 may include hundreds of thousands of individual networks of computers.

The client computers 12 can execute web browser programs 16, such as the NAVIGATOR, EXPLORER, or FIRE-FOX browser programs, to locate the web pages or records 30 stored on advertiser server 14. The browser programs 16 allow the users to enter addresses of specific web pages 30 to be retrieved. These addresses are referred to as Uniform Resource Locators, or URLs. In addition, once a page has

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been retrieved, the browser programs 16 can provide access to other pages or records when the user "clicks" on hyperlinks to other web pages. Such hyperlinks are located within the web pages 30 and provide an automated way for the user to enter the URL of another page and to retrieve that page. The pages 5 can be data records including as content plain textual information, or more complex digitally encoded multimedia content, such as software programs, graphics, audio signals, videos, and so forth.

in FIG. 1, client computers 12 communicate through the network 20 with various product, service, and benefit providers, including account management server 22, match engine server 24, and advertiser servers 14 using the functionality provided by a Hypertext Transfer Protocol (HTTP), although 15 other communications protocols, such as FTP, SNMP, TEL-NET, and a number of other protocols known in the art, may be used. Preferably, match engine server 24, account management server 22, and advertiser servers 14 are located on the World Wide Web.

As discussed above, at least two types of server are contemplated in a preferred embodiment of the present invention. The first server contemplated is an account management server 22 comprising a computer storage medium 32 and a processing system 34. A database 38 is stored on the storage 25 medium 32 of the account management server 22. The database 38 contains advertiser account information. It will be appreciated from the description below that the system and method of the present invention may be implemented in software that is stored as executable instructions on a computer 30 storage medium, such as memories or mass storage devices, on the account management server 22. Conventional browser programs 16, running on client computers 12, may be used to access advertiser account information stored on account management server 22. Preferably, access to the account manage- 35 ment server 22 is accomplished through a firewall, not shown, which protects the account management and match result placement programs and the account information from external tampering. Additional security may be provided via enhancements to the standard communications protocols 40 such as Secure HTTP or the Secure Sockets Layer.

The second server type contemplated is a match engine web server 24. A match engine program permits network users, upon navigating to the match engine web server URL or sites on other web servers capable of submitting queries to 45 the match engine web server 24 through their browser program 16, to complete at least in part at least one questionnaire containing question(s) applicable to network users; the questions being preferably demographic, geographic, psychographic (multigraphic) in nature; in order to identify products, 50 services, and benefits (PSBs) of interest to network users.

In a preferred embodiment of the present invention, the match engine web server 24 generates a match result list that includes relevant entries obtained from and formatted by, at least in part, the results of the bidding process conducted by 55 the account management server 22. The match engine web server 24 generates a list of hypertext links to documents that contain information relevant to PSB criteria entered by the user at the client computer 12. The match engine web server transmits this list, in the form of a web page, to the network 60 user, where it is displayed on the browser 16 running on the client computer 12. In addition, the match result list web page, an example of which is presented in FIG. 7, will be discussed below in further detail.

Match engine web server 24 is connected to the Internet 20. 65 In a preferred embodiment of the present invention, match engine web server 24 includes a match database 40 comprised

of PBS listing records used to generate match results in response to user queries. In addition, match engine web server 24 may also be connected to the account management server 22. Account management server 22 may also be connected to the Internet. The match engine web server 24 and the account management server 22 of the present invention address the different information needs of the users located at client com-

For example, one class of users located at client computers In a preferred embodiment of the present invention, shown 10 12 may be PSB providers such as advertising web site promoters or owners having advertiser web pages 30 located on advertiser web servers 14. These advertising web site promoters, or advertisers, may wish to access account information residing in storage 32 on account management server 22. An advertising web site promoter may, through the account residing on the account management server 22, participate in a competitive bidding process with other advertisers. An advertiser may bid on any number of PSB criteria relevant to the content of the advertiser's offerings and/or its web site. In one embodiment of the present invention, the relevance of one or more bidded criteria to an advertiser's web site is determined through a manual editorial process prior to insertion of the PSB listing containing the criteria and advertiser web site URL into the database 40. In an alternate embodiment of the present invention, the relevance of one or more bidded criteria in a PSB listing to the corresponding web site may be evaluated using a computer program executing at processor 34 of account management server 22, where the computer program will evaluate the criteria and corresponding web site according to a set of predefined editorial rules.

The higher bids receive more advantageous placement on the PSB result list page generated by the match engine 24 when a match request using the criteria bid on by the advertiser is executed. In a preferred embodiment of the present invention, the amount bid by an advertiser comprises a money amount that is deducted from the account of the advertiser for each time the advertiser's web site is accessed via a hyperlink on the PSB result list page. A PSB seeker "clicks" on the hyperlink with a computer input device to initiate a retrieval request to retrieve the information associated with the advertiser's hyperlink. Preferably, each access or "click" on a PSB result list hyperlink will be redirected to the match engine web server 24 to associate the "click" with the account identifier for an advertiser.

This redirect action, which is not readily apparent to the seeker, will access account identification information coded into the PSB result page before accessing the advertiser's URL using the PSB result list hyperlink clicked on by the seeker. The account identification information is recorded in the advertiser's account along with information from the retrieval request as a retrieval request event. Since the information obtained through this mechanism conclusively matches an account identifier with a URL in a manner not possible using conventional server system logs known in the art, accurate account debit records will be maintained. Optionally, the advertiser's web site description and hyperlink on the PSB result list page is accompanied by an indication that the advertiser's listing is a paid listing. Optionally, each paid listing displays a "cost to advertiser," which is an amount corresponding to a "price-per-click" paid by the advertiser for each referral to the advertiser's site through the PSB result list.

A second class of users at client computers 12 may comprise seekers seeking specific information on the web. The seekers may access, through their browsers 16, a match engine web page 36 residing on web server 24. The match engine web page 36 includes a questionnaire in which a

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seeker may type or otherwise enter answers to one or more questions concerning the seeker. Alternatively, the seeker may query the match engine web server 24 through a questionnaire hyperlinked to the match engine web server 24 and located on a web page stored at a remote web server. When the seeker has finished completing anywhere from one to, preferably, a required all of the questions in the questionnaire containing one or more questions, the seeker may transmit the query to the match engine web server 24 by clicking on a provided hyperlink. The match engine web server 24 will then generate a match result list page and transmit this page to the seeker at the client computer 12.

The seeker may click on the hypertext links associated with each listing on the PSB results page to access the corresponding web pages. The hypertext links may access web pages 15 anywhere on the Internet, and include paid listings to advertiser web pages 30 located on advertiser web servers 14. In a preferred embodiment of the present invention, the match result list also includes non-paid listings that are not placed as a result of advertiser bids. The non-paid hypertext links may 20 also include links manually indexed into the database 40 by an editorial team. Preferably, non-paid listings may appear among the paid advertiser listings. Optionally, the non-paid listings follow the paid advertiser listings on the match results page.

FIG. 2 is a diagram showing menus, display screens, and input screens presented to an advertiser accessing the account management server 22 through a conventional browser program 16. The advertiser, upon entering the URL of the account management server 22 into the browser program 16 of FIG. 1, invokes a login application, discussed below as shown at screen 110 of FIG. 2, running on the processing system 34 of the server 22. Once the advertiser is logged-in, the processing system 34 provides a menu 120 that has a number of options and further services for advertisers. These items, which will be discussed in more detail below, cause routines to be invoked to either implement the advertiser's request or request further information prior to implementing the advertiser's request.

In one embodiment of the present invention, the advertiser and access several options through menu 120, including requesting customer service 130, viewing advertiser policies 140, performing account administration tasks 150, adding money to the advertiser's account 160, managing the account's advertising presence on the match engine 170, and 45 viewing activity reports 180. Context-specific help 190 may also generally be available at menu 120 and all of the abovementioned options.

The login procedure of the preferred embodiment of the present invention is shown in FIGS. 3 and 4 for two types of 50 user. FIG. 3 shows the login procedures 270 for an advertiser, FIG. 4 shows the login procedures 290 for an administrator managing and maintaining the system and method of the present invention. As discussed above, the advertiser or administrator at a client computer 12 must first use a browser 55 program at steps 271 or 291 to access the account management server. After the advertiser navigates to the URL of the login page to start the login process at step 272 or 292, the processing system 34 of the account management server 22 invokes a login application at steps 274 or 294. According to 60 this application, the processor provides an input screen 110 (FIG. 2) that requests the advertiser's or administrator's user name and password. These items of information are provided at steps 276 or 295 to a security application known in the art for the purpose of authentication, based on the account infor- 65 mation stored in a database stored in storage 32 of account management server 22.

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According to FIG. 3, after the user has been authenticated as an advertiser, the advertiser is provided with the menu screen 120 of FIG. 2 and limited read/write access privileges only to the corresponding advertiser account, as shown in step 278. The advertiser login event 278 may also be recorded in step 280 in an audit trail data structure as part of the advertiser's account record in the database. The audit trail is preferably implemented as a series of entries in database 38, where each entry corresponds to an event wherein the advertisers account record is accessed. Preferably, the audit trail information for an account record may be viewed by the account owner and other appropriate administrators.

However, if the user is authenticated as an administrator in step 295 of FIG. 4, the administrator is provided with specified administrative access privileges to all advertiser accounts as shown in step 296. The administrator login event 296 is recorded in step 297 in the audit trail data structure portion of the administrator's account record. This audit trail is preferably implemented as a series of entries in database 38, where each entry corresponds to an event wherein the administrators account record is accessed. Most preferably, the administrator's audit trail information may be viewed by the account owner and other appropriate administrators.

Furthermore, instead of the general advertiser main menu shown to the authenticated advertiser users in step 282, the authenticated administrator is provided in step 298 with access to search the database 38 of advertiser accounts. Preferably, a database search interface is provided to the administrator that enables the administrator to select an advertiser account to monitor.

For example, the interface may include query boxes in which the administrator may enter an account number or username or contact name corresponding to an account the administrator wishes to access. When the administrator selects an advertiser account to monitor in step 299, the administrator is then brought to the main advertiser page 120 of FIG. 2, which is also seen by the advertisers.

Access to the account information 32 located on the account management server 22 is restricted to users having an account record on the system, as only those users are provided with a valid login name and password. Password and login name information is stored along with the user's other account information in the database 38 of the account management server 22, as shown in FIG. 1. Account information, including a login user name and password, is entered in the database 38 of FIG. 1 via a separate online registration process that is outside the scope of the present invention.

FIG. 5 is a diagram showing the types of information contained in each advertiser account record 300 in the database. First, an advertiser account record 300 contains a username 302 and a password 304, used for online authentication as described above. The account record also contains contact information 310 (e.g., contact name, company name, street address, phone, e-mail address).

Contact information 310 is preferably utilized to direct communications to the advertiser when the advertiser has requested notification of key advertiser events under the notification option, discussed below. The account record 300 also contains billing information 320 (e.g., current balance, credit card information). The billing information 320 contains data accessed when the advertiser selects the option to add money to the advertiser's account. In addition, certain billing information, such as the current balance, may trigger events requiring notification under the notification option. The audit trail section 325 of an account record 300 contains a list of all events wherein the account record 300 is accessed. Each time an account record 300 is accessed or modified, by an admin-

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istrator or advertiser, a short entry describing the account access and/or modification event will be appended to the audit trail section 325 of the administrator or advertiser account that initiated the event. The audit trail information may then be used to help generate a history of transactions made by the 5 account owner under the account.

The advertising information section 330 contains information needed to conduct the online bidding process of the present invention, wherein a position is determined for preferably a web site description and hyperlink within a product/ 10 service/benefit (PSB) result list generated by a match engine. The advertising data 330 for each user account 300 may be organized as zero or more subaccounts 340. Each subaccount 340 comprises at least one PSB listing 344. Each PSB listing corresponds to a bid on one or more PSB criteria. An advertiser may utilize subaccounts to organize multiple bids on multiple PSB criteria sets (corresponding to multiple PSBs), or to organize bids for multiple web sites. Subaccounts are also particularly useful for advertisers seeking to track the performance of targeted market segments. The subaccount 20 superstructure is introduced for the benefit of the advertisers seeking to organize their advertising efforts, and does not affect the method of operation of the present invention.

Alternatively, the advertising information section need not include the added organizational layer of subaccounts, but 25 may simply comprise one or more PSB listings.

The PSB listing 344 corresponds to at least one criteria/bid pairing and contains key information to conduct the online competitive bidding process. Preferably, each PSB listing comprises the following information. PSB criteria 352, web site description 354, URL 356, bid amount 358, and a title 360. The PSB criteria 352 comprises one or more criteria factors, preferably of a demographic, geographic, psycographic, preference/interest nature (in any language). Each criterion factor in turn comprises a character string. The PSB 35 criteria is the object of the competitive online bidding process. The advertiser selects at least one PSB criterion to bid on that is relevant to the content of the advertiser's web site and/or to their product, service, benefit, informational offering(s). Ideally, the advertiser may select (a) PSB criteria that 40 is/are targeted to entity information/criteria entered by seekers desiring the information on the advertiser's web site, their products, services, benefits and/or information; although less common/less related PSB criteria may also be selected to ensure comprehensive coverage of relevant entity criteria for 45 bidding.

The web site description 354 is a textual (optionally; and/or visual, audio, etc) description (of any suitable length/size) of the content of the advertiser's web site (and/or their PSB[s]) and may be displayed as part of the advertiser's entry in a PSB 50 result list. The PSB listing 344 may also contain a title 360 of the web site that may be displayed as the hyperlinked heading to the advertiser's entry in a PSB result list. The URL 356 contains the Uniform Resource Locator address of the advertiser's web site. When the user clicks on the hyperlink pro- 55 vided in the advertiser's result list entry, the URL is provided to the browser program. The browser program, in turn, accesses the advertiser's web site through the redirection mechanism discussed above. The URL may also be displayed as part of the advertiser's entry in a PSB result list. Alterna- 60 tively, since millions of product, service, and benefit providers (especially small to medium sized companies and professional practices) do not have websites, the current invention's system administrator itself may optionally provide such web sites, "landing pages," and/or other "destinations" where fur- 65 ther information, and/or including contact information, concerning these providers may be provided/displayed to the

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PSB seeker; Thereby negating the need for a PSB provider to have a web site, web site title, or URL.

The bid amount 358 preferably is a money amount bid by an advertiser for a listing. This money amount is deducted from the advertiser's prepaid account or is recorded for advertiser accounts that are invoiced for each time a match request is executed by a user on the corresponding PSB criteria and the PSB result list hyperlink is used to refer the seeker to the advertiser's web site. Finally, a rank value is a value generated dynamically, preferably by the processing system 34 of the account management server 22 shown in FIG. 1, each time an advertiser places a bid or a seeker enters a PSB query. The rank value of an advertiser's PSB listing determines the placement location of the advertiser's entry in the PSB result list generated when a PSB match request is executed on the corresponding PSB criteria. Preferably, rank value is an ordinal value determined in a direct relationship to the bid amount 358; the higher the bid amount, the higher the rank value, and the more advantageous the placement location on the PSB result list.

Most preferably, the rank value of 1 is assigned to the highest bid amount with successively higher ordinal values (e.g., 2, 3, 4, . . . ) associated with successively lower ranks and assigned to successively lower bid amounts.

In one embodiment, each bid may be dependent upon or require satisfaction of various criteria which must be met in order for the bid amount to remain the same; or for the listing to remain on the results list and displayed to a seeker at all. For example, thanks to the current invention's dynamic, substantially in real time nature, an advertiser might specify that for the first 1,000 times within a given time period, every time their listing is clicked, they are paying \$2.37/click. Thereafter (though the position of their listing will normally drop for doing so), for the remainder of the given time period, they will pay \$1.02/click. Alternatively, the advertiser could elect to have their listing dropped entirely after those 1,000 clicks. In another example, an advertiser could designate a certain time of day (time zone determinate), only during which its listings are to appear. It is to be understood that the amount bid may be dependent on as many criteria as is deemed desirable by the system operator and its advertisers. As can be readily seen, a virtually limitless number of bidding parameters, whether simple or complex, may be readily utilized with the current system; all being well within the present invention's scope.

Once logged in, an advertiser can perform a number of straightforward tasks set forth in menu 120 of FIG. 2, including viewing a list of rules and policies for advertisers, and requesting customer service assistance. These items cause routines to be invoked to implement the request. For example, when "Customer Service" is selected, an input screen 130 is displayed to allow the advertiser to select the type of customer service requested. In addition, forms may be provided on screen 130 so that an advertiser may type a customer com-

ment into a web-based input form.

When "View Advertiser Policies" is selected, a routine will be invoked by processing system 34 of the account management server 22 FIG. 1. As shown in FIG. 2, the routine will display an informational web page 140. The web page 140 sets forth the advertiser policies currently in effect (e.g., "All PSB listing descriptions must clearly relate to the PSB criteria")

Menu 120 of FIG. 2 also includes an "Account Administration" selection 150 which allows an advertiser, among other things, to view and change the advertiser's contact information and billing information, or update the advertiser's access profile, if any. Web-based forms well known in the

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art and similar to those discussed above are provided for updating account information.

The "Account Administration" menu also includes a selection enabling an advertiser to view the transaction history of the advertiser's account. Under the "View Transaction History" selection, the advertiser may invoke routines to view a listing of past account transactions (e.g., adding money to account, adding or deleting bidded PSB criteria, or changing a bid amount). Additional routines may be implemented to permit advertisers to display a history of transactions of a specified type, or that occur within a specified time frame. The transaction information may be obtained from the audit trail list 325 of FIG. 5, described above.

Clickable buttons that may be implemented in software, web-based forms, and/or menus, etc. may be provided as 15 known in the art to enable advertisers to specify such limitations.

In addition, the "Account Administration" menu 150 of FIG. 2 includes a selection enabling an advertiser to set notification options. Under this selection, the advertiser may 20 select options that will cause the system to notify the advertiser when certain key events have occurred. For example, the advertiser may elect to set an option to have the system send conventional electronic mail messages to the advertiser when the advertises account balance has fallen below a specified 25 level. In this manner, the advertiser may receive a "warning" to replenish the account before the account is suspended (meaning the advertiser's listings will no longer appear in PSB result lists). Another key event for which the advertiser may wish notification is a change in position of an advertis- 30 er's listing in the PSB result list generated for (a) particular PSB criteria. For example, an advertiser may wish to have the system send a conventional electronic mail message to the advertiser if the advertiser has been outbid by another advertiser for a particular PSB criteria (set) (meaning that the 35 advertiser's listing may appear in a position farther down on the PSB result list page than previously). When one of the system-specified key events occurs, a database search is triggered for each affected PSB listing. The system will then execute the appropriate notification routine in accordance 40 with the notification options specified in the advertiser's account. Preferably, advertiser has previously established various parameters in its account 170 whereby when such notifications are "sent out," preferably notification-concurrent actions are automatically taken to address the condition 45 (s) present which caused the notification in the first place e.g., as in the case where the notified advertiser's bid on a given PSB criteria is automatically increased by some amount as a result of another competing advertiser's change in position within the PSB result list.

Referring back to FIG. 2, a selection also appears in menu 120 that permits an advertiser to add money to the advertiser's account, so that the advertiser will have funds in their account to pay for referrals to the advertiser's site through the PSB results page. Preferably, only advertisers with funds in their 55 advertiser's accounts may have their paid listings included in any PSB result lists generated. Most preferably, advertisers meeting selected business criteria may elect, in place of maintaining a positive account balance at all times, incur account charges regardless of account balance and pay an invoiced 60 amount at regular intervals which reflects the charges incurred by actual referrals to the advertiser's site generated by the match engine. The process that is executed when the "Add Money to Account" selection is invoked is shown in further detail in FIG. 6, beginning at step 602. When the "Add 65 Money to Account" selection is clicked in step 604, a function is invoked which receives data identifying the advertiser and

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retrieves the advertiser's account from the database. The executing process then stores the advertiser's default billing information and displays the default billing information for the advertiser in step 606. The displayed billing information includes a default amount of money to be added, a default payment type, and default instrument information.

In the preferred embodiment of the present invention, an advertiser may add funds online and substantially in real time through the use of a credit card, although the use of other payment types are certainly well within the scope of the present invention. For example, in an alternate embodiment of the present invention, advertisers may add funds to their account by transferring the desired amount from the advertiser's bank account through an electronic funds verification mechanism known in the art such as debit cards, in a manner similar to that set forth in U.S. Pat. No. 5,724,424 to Gifford. In another alternate embodiment of the present invention, advertisers can add funds to their account using conventional paper-based checks. In that case, the additional funds may be updated in the account record database through manual entry. The instrument information includes further details regarding the type of payment. For example, for a credit card, the instrument information may include data on the name of the credit card (e.g., MasterCard, Visa, or American Express), the credit card number, the expiration date of the credit card, and billing information for the credit card (e.g., billing name and address).

In a preferred embodiment of the present invention, only a partial credit card number is displayed to the advertiser for security purposes.

The default values displayed to the advertiser are obtained from a persistent state, e.g., stored in the account database. In an embodiment of the present invention, the stored billing information values may comprise the values set by the advertiser the last (e.g. most recent) time the process of adding money was invoked and completed for the advertiser's account. The default billing information is displayed to the advertiser in a web-based form. The advertiser may click on the appropriate text entry boxes on the web-based form and make changes to the default billing information. After the advertiser completes the changes, the advertiser may click on a hyperlinked "Submit" button provided on the form to request that the system update the billing information and current balance in step 608. Once the advertiser has requested an update, a function is invoked by the system which validates the billing information provided by the advertiser and displays it back to the advertiser for confirmation, as shown in step 610. The confirmation billing information is displayed in read-only form and may not be changed by the advertiser.

The validation step functions as follows. If payment is to be debited from an advertiser's external account, payment may be authenticated, authorized and completed using the system set forth in U.S. Pat. No. 5,724,424 to Gifford. However, if the payment type is by credit card, a validating algorithm is invoked by the system, which validates the credit card number using a method such as that set forth in U.S. Pat. No. 5,826, 241 to Stein et al. The validating algorithm also validates the expiration date via a straightforward comparison with the current system date and time. In addition, the function stores the new values in a temporary instance prior to confirmation by the advertiser.

Once the advertiser ascertains that the displayed data is correct, the advertiser may click on a "Confirm" button provided on the page to indicate that the account should be updated in step 612. In step 612, a function is invoked by the system which adds money to the appropriate account balance, updates the advertisers billing information, and appends the

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billing information to the advertiser's payment history. The advertiser's updated billing information is stored to the persistent state (e.g., the account record database) from the temporary instance.

Within the function invoked at step 612, a credit card 5 payment function may be invoked by the system at step 614. In an alternate embodiment of the present invention, other payment functions such as debit card payments may be invoked by defining multiple payment types depending on the updated value of the payment type.

If the payment type is credit card, the user's account is credited immediately at step 616, the user's credit card having already been validated in step 610. A screen showing the status of the add money transaction is displayed, showing a transaction number and a new current balance, reflecting the amount added by the just-completed credit card transaction.

In an alternate embodiment of the present invention, after the money has been added to the account, the amount of money added to the account may be allocated between sub-accounts the end of the add money process at step 616. If the advertiser has no subaccounts, all of the money in the account is a general allocation. However, if the advertiser has more than one subaccount, the system will display a confirmation and default message prompting the advertiser to "Allocate Money Between Subaccounts".

The menu selection "Allocate Money Between Subaccounts" may be invoked when money is added to the advertiser account after step 616 of FIG. 6, or it may be invoked within the "Account Management" menu 170 shown in FIG. 2. The "Account Management" menu 170 is accessible from 30 the Advertiser Main Page 120, as shown in FIG. 2. This "Allocate Money Between Subaccounts" menu selection permits an advertiser to allocate current and any pending balances of the advertiser's account among the advertisers subaccounts. The system will then update the subaccount 35 balances. The current balance allocations will be made in real or near real time, while the pending balance allocations will be stored in the persistent state. A routine will be invoked to update the subaccount balances to reflect the pending balance allocations when the payment for the pending balance is 40 processed. Automatic notification may be sent to the advertiser at that time, if requested. This intuitive online account management and allocation permits advertisers to manage their online advertising budget quickly and efficiently. Advertisers may replenish their accounts with funds and allocate 45 their budgets, all in one easy web-based session. The computer-based implementation eliminates time consuming, high cost manual entry of the advertiser's account transactions.

The "Allocate Money Between Subaccounts" routine begins when an advertiser indicates the intent to allocate 50 money by invoking the appropriate menu selection at the execution points indicated above. When the advertiser indicates the intent to allocate, a function is invoked by the system to determine whether there are funds pending in the current balance (i.e., unactivated account credits) that have not yet 55 been allocated to the advertiser's subaccounts, and displays the balance selection options. In a preferred embodiment of the present invention, an account instance is created and a pending current balance account field is set from the persistent state.

If there are no unallocated pending funds, the system may display the current available balances for the account as a whole as well as for each subaccount. The advertiser then distributes the current available balance between subaccounts and submits a request to update the balances. A function is 65 invoked which calculates and displays the current running total for subaccount balances. The current running total is

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stored in a temporary variable which is set to the sum of current balances for all subaccounts for the specified advertiser. The function also validates the new available subaccount balances to make sure that the total does not exceed the authorized amount. If the new advertiser-set available subaccount balances does not exceed the authorized amount, a function is invoked which will update all of the subaccount balances in the persistent state and display the update in read-only format.

If there are pending funds in the current account balance, the pending funds must be allocated separately from the available current balance. The pending funds will then be added into the available current balance when the funds are received. The function must therefore prompt the advertiser to choose between allocating pending funds or allocating available funds. The allocating pending funds selection works in much the same manner as the allocating available funds selection outlined above. After the advertiser chooses to allocate pending funds, a routine is invoked to display current pending balances for the account and the subaccounts. The advertiser distributes the pending subaccount balances between campaigns and submits a request to update the balances. A function is invoked which calculates and displays the current running totals for the pending subaccount balances. This function also validates the new pending subaccount allocations to make sure that the allocations do not exceed any authorized amount. The current running total of pending allocations is set to the sum of current pending balances for all subaccounts for the advertiser. If the new user-set pending subaccount balances or the total of such balances do not exceed any authorized amount, the function will update all of the pending subaccount allocations in the persistent state, e.g. the advertiser's account in the database, and display the update in read-only format.

As indicated above and shown in FIG. 2, a routine displaying the account management menu 170 may be invoked from the advertiser main menu 120. Aside from the "Allocate Money Between Subaccounts" selection described above, the remaining selections all use to some extent the PSB criteria present in the advertiser's account on the database, and may also affect the advertiser's entry in the PSB result list. Thus, a further description of the PSB result list generated by the match engine is provided at this point.

When a remote product/service/benefit/information seeker accesses the questionnaire/criteria query page on the match engine web server 24 and executes a PSB match request according to the procedure described previously, the match engine web server 24 preferably generates and displays a PSB result list where one or more criteria of preferably each PSB listing in the PSB result list preferably exactly matches at least one of the PSB criteria of the match request query entered by the remote seeker.

Alternatively, "canonicalized" criteria of (a) PSB listing(s) in the PSB result list may preferably exactly match the canonicalized match request query entered by the remote seeker.

The canonicalization of criteria factors/terms (when applicable) used in queries and PBS listings removes common irregularities of criteria factors/terms entered by seekers and web site promoters (product/service/benefit/information providers); such as capital letters and pluralizations, in order to generate relevant results. In another embodiment, the match engine web server 24 may generate and display a PSB result list where one or more criteria of at least one PSB listing in the PSB result list does not exactly match at least one of the PSB criteria of the match request query entered by the remote seeker.

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However, alternate schemes for determining a match between the criteria of the PSB listing and the match request query entered by the remote seeker are well within the scope of the present invention. For example, string matching algorithms known in the art may be employed to generate matches where the PSB criteria of the PSB listing and the match request query have the same root but are not exactly the same (e.g., reader vs. reading). Alternatively a thesaurus database of synonyms may be stored at match engine web server 24, so that matches may be generated for (a) PSB criteria having 10 synonyms. Internationalization methodologies may be employed to refine PSB match requests for users outside the United States. For example, country or language-specific PSB results may be generated, by a cross-reference of the advertiser account database.

Numerous types/versions/formats/presentations/instantiations of the questionnaire/survey/profile e.g.; including variations in the number, type, and format of the questions/data asked/supplied, including preferably those of a demographic, geographic, psychographic, firmographic, preference/inter- 20 est/usage/future usage nature; the answers to be supplied by the PSB seekers, with or without personally-identifying information, etc, have been used for many decades and are well within the knowledge of those in the art. Accordingly, no attempt will be made here to attempt to detail every possible 25 version of such standard questionnaires/surveys/profiles, as the options are virtually limitless. Any questionnaire deemed suitable (e.g., by the system administrator) for the system of the present invention may be utilized. Note, however, that the architecture for and procedures to implement questionnaires 30 is not conventional, in the bidded-position, pay for performance system of matching PSB providers with PSB seekers as detailed herein.

The questionnaire may use any means Suitable to complete the questionnaire e.g., click on an icon, place an "X," "check," 35 or other mark on, next to, or nearby a selection, fill in a box, drop-down menus; or any other means known in the art for indicating a choice or selection of one or more items from a list on or off of a web page. The questionnaire may also make use of specific numbers and figures, letters and letter combinations, number/letter combinations, words, range(s), range (s) of number(s), value range(s), etc; and/or any other means as is well known in the art for completing the questions of a questionnaire on or of a web page. FIG. 10 illustrates an example of a seeker questionnaire which may be used in one 45 embodiment of the present invention. While in a preferred embodiment, all the questions are "closed-ended;" that is, where a seeker is given a finite selection of specified answers from which to choose for each question; in another embodiwhere there are no specific, predetermined answer(s), and seeker is free to "share its thoughts" in their own words.

In such an "open-ended" embodiment, the well-known-tothe-arts natural language processing (NLP) (computational linguistics) or some other method as is well known to the arts 55 may be used in order to assist the system operator in minimizing human involvement in the correlation of the seeker's questionnaire information with that of the advertisers chosen

Possible questionnaire questions/data requests for indi- 60 viduals may include name, address, e-mail address, telephone number, date of birth/age, income (exact dollar amount or range), marital status, presence of children (number, ages, sex), occupation, education level, credit cards used, credit score(s), whether homeowner or renter, interests and activi- 65 ties (e.g., bicycling, golf, running, bowling, snow/water skiing, reading, fishing, craps, Internet surfing, photography,

travel [cruise, car, plane, train], wines, coin/stamp collecting, watching TV, etc.), Also; products owned/used (auto make, model, year; when/where/why/how bought/paid for), services used, current/future intentions (with or without time periods/ranges; getting married, having a baby, buying/selling a home; buying/leasing a new vehicle, RV, boat, aircraft, or any other product, etc), medical/health status and conditions present (asthma, arthritis, high blood pressure, cancer, etc), types of investments made, social concerns, insurance types held/desired, musical preferences, nutrition and diet.

In other "non-human" entity system applications (e.g. business to business, business to government, government to government, etc), the requisite questionnaire(s) will of necessity utilize questions and "data indicators" appropriate to those applications and markets (e.g. firmographics) These other entity applications are well within the scope of the all-entity enablement of the present invention.

Preferably, personally-identifying questions are excluded from the questionnaire in order to maximize system's desirability and use by seekers. If any individual advertisers desire to require personal information (or other information not initially requested by the system's initial questionnaire) as a condition of-or to qualify for-obtaining their offering(s) (such as with government programs, tobacco and alcohol companies, etc), such information may optionally be collected after the seeker has submitted its match query but before delivery of the advertiser's information concerning its product, service, benefit, or information offering(s) to the seeker; via the presentation/delivery to the seeker of an additional or supplemental questionnaire to be completed. In a similar manner, additional questions may be presented to the seeker, at any time during the process, depending, for example, on seeker's answers/responses to various questions as seeker proceeds through the questionnaire (e.g., as when clicking from one page of a questionnaire to the next). This may be repeated any number of times as is deemed suitable.

Though the present system is fully operational with as few as one question (e.g., just the seeker's zip code, city, or sex) in the questionnaire being answered; the more questions answered, and answered as precisely as possible, the more comprehensive and useful the system is to the seeker (and to the advertisers). Accordingly, it is to be understood that the present invention does not require that the presented questionnaire be completed in its entirety by the seeker, in order to be presented with a results list; only that at least one of the questions/data fields of the questionnaire be answered/completed; in order to produce matches with at least some of the advertiser(s).

That said, in order to maximize the systems effectiveness ment, one or more of the questions may be "open-ended," 50 and usefulness to all parties (the advertiser/providers, the seekers, and the system operator), in a most preferred embodiment the system operator does require that the questionnaire be completed in its entirety in order to receive a result list. Alternatively, at least one or more certain "highimportance" specified question(s) may be required to be completed/answered in order for seekers to receive a results list at all. No attempt shall be made here to list all possible modifications and variations given the near impossibility of doing so. Any and all such options/embodiments are well within the scope of the present invention.

It is to be understood that alternate schemes for obtaining the needed information/data from entities for its correlation with the advertiser/providers are well within the scope of the present invention. While their use is preferred, questionnaire/ survey/profiles are not required. For example, entity match requests may be integrated in whole or in part with existing or future search engine technologies/methodologies (or even

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other applications), e.g., instead of the use of a questionnaire in order to obtain the needed entity criteria, an entity could simply enter one or more of their criterion directly into a search engines query box/field (even optionally along with one or more search terms) e.g., as in the following (or some similar or related) manner:

\$50,000-\$74,999+F+37+CA+91360+MC+Sports;

wherein this data corresponds to:

Household Income+Sex+Age+State of Residence+Zip Code+whether or not Minor Children are in the household+Likes/Dislikes/Hobbies/Activities

Drop down boxes may be utilized to quickly and easily guide a seeker through such a process. As is obvious, in such a version, some type of indication/election will of necessity need to be made by entity in order to designate that a match request is being made of the match engine; either instead of, in addition to, or subsequent to a search request being conducted on the search engine; in order for seeker to obtain the PSB result list they desire. This is so, because, as is now understood; search engines by definition are unable to produce match results just as match engines by definition are unable to produce search results. In a related embodiment, an additional (preferably close to the search box) query/field box separate from the search query/field box may be used in this manner; preferably where the match request is processed at substantially the same time as the search request is. In this way, the curious and anxious searcher/seeker will concurrently discover both what they're looking for (via Search and Match) AND what they didn't know was already theirs to claim (via Match). Any and all such "questionnaire-free" criteria-acquisition variations/embodiments are well within the scope of the present invention.

An example of a PSB result list display used in an embodiment of the present invention is shown in FIG. 7, which is a display of the first few entries resulting from a match request query from a seeker with the following criteria factors (characteristics):

Female+Age 37+\$50,000-\$74,999 Total Household Income+Minor Children in Household+California Resident+Enjoys Sports

As shown in FIG. 7, a single entry, such as entry 710a in a PSB result list consists of a description 720 preferably of a web site, preferably comprising a title and a short textual 45 description, and preferably a hyperlink 730 which, when clicked by a seeker, directs the seeker's browser preferably to the URL where the described web site is located. The URL 740 may also optionally be displayed in the PSB result list entry 710a, as shown in FIG. 7. The "click through" of a result item occurs when the remote seeker viewing the PSB result list display 710 of FIG. 7 selects, or "clicks" on the hyperlink 730 of the PSB result list display 710. In order for a "click through" to be completed, the seeker's click should be recorded at the account management server and redirected to 55 the advertiser's URL via the redirect mechanism discussed above.

PSB result list entries 710a-710g may also show the rank value, 760a through 760g, of the advertiser's listing. The rank valve is an ordinal value, preferably a number, generated and assigned to the PSB listing by the processing system 34 of FIG. 1. Preferably, the rank value is assigned through a process, implemented in software, that establishes an association between the bid amount, the rank, and the criteria of a PSB listing. The process gathers all advertiser listings having criteria sets wherein at least one criterion of each advertiser criteria set matches at least one criterion of the seeker; but

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only where the advertiser criteria sets DO NOT contain any criteria which does not match the criteria of the seeker (further explained below). Then it sorts the listings in order from highest to lowest bid amount, and assigns a rank value to each listing in order. The highest bid amount receives the highest rank value, the next highest bid amount receives the next highest rank value, proceeding to the lowest bid amount, which receives the lowest rank value. Most preferably, the highest rank value is 1 with successively increasing ordinal values (e.g., 2, 3, 4, ...) assigned in order of successively decreasing rank. The correlation between rank value and bid amount is illustrated, in FIG. 7, where each of the paid advertiser list entries 710a through 710d and 710f and 710g display the advertiser/providers' bid amounts 750a through 750d and 750f and 750g for that entry.

In a preferred embodiment, where seekers are required to complete the entire questionnaire as a condition of receiving a result list at all, the system and method of FIG. 1 implement result list placement logic which may, by way of example and not limitation, be summarized by the following rules:

- 1. You may at all times create and bid on any criteria (characteristics) set you desire; your set containing anywhere from as few as one criterion factor (e.g. just one or more of the 40,000+Zip Codes) up to and including all of our available criteria factors. You're always able to decide for yourself how best to target your products, services, and benefits to your customers/clients, You always control exactly who receives your offers, and, often just as important, who doesn't. (Don't even try getting this kind of pinpoint targeting and control from search engine marketing [SEM] or search engine optimization [SEO]—because you can't.)
- Your listing/advertisement will be delivered/presented only to seekers meeting at least your complete criteria set; whether your set consists of one criterion . . . or 25.
- 35 3. We will place you at the position you requested among others targeting the same exact criteria set at the lowest price possible.
  - 4. There is at all times a minimum bid of \$1.00 per criteria set; regardless of the number of or type of criterion factors chosen.
- 40 5. Minimum bid increments are \$0.01.
  - 6. In order to maximize seekers attention to and interest in their result lists, unpaid listings may at system operator's sole discretion be placed anywhere before, after, or among the paid listings.
- 7. If and when result lists are arranged/displayed in categories, a higher amount bid listing will always appear above a lower amount bid listing; regardless of the criteria set selected by each advertiser/provider for each of their respective listings. Ties under this particular scenario will be broken by date of listing; earliest on top, 2<sup>nd</sup> earliest 2<sup>nd</sup>, 3<sup>rd</sup> earliest 3<sup>rd</sup>, etc (referring here to positions among the tied listings; not to positions within the entire result list).
- 8. Subject to any criteria bid caps you may have set, if there are ties between you and one or more other advertisers sharing the same exact criteria set that make your requested position unavailable, we will make your new bid \$0.01 more than the tie amount and you will be right on top of the ties. This means you might get a position higher than you requested.
- 9. If your requested position cannot be obtained because your bid cap is too low, we will get you the best position for your bid cap. Often that means that your new bid will be equal to your bid cap, but if we can get that same position for a lower price, we will give you the lower price.
- 10. You bid only against others also targeting your exact same criteria set. Your "Current Rank" and "Bid to Become #1" components are valid as between you and the other advertisers targeting this exact same criteria set [FIG. 9]. When seek-

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ers submit queries, your "current rank" and "bid to become number one" may not represent your listing's position within the result list presented to a given seeker. This is due to the required inclusion in the seeker's result list of any and all advertisers having one or more criterion factors in common with any of the seeker's criterion factors except when such advertiser criteria sets ALSO contain any criterion factors which contradict any of the seeker's criteria (this will be further explained below). Advertisers who's criteria sets both match in whole or in part seeker's criteria set AND which also licludes additional criteria beyond seeker's, because in such cases the advertisers have indicated a desire for even greater specificity, are not displayed.

Though they could be the same occasionally; in the majority of the cases, your listing will normally differ from the 15 "current rank" and "bid to become #1" numbers shown in your change bids selection screen(s) [FIG. 9]. There is no need, however, to be concerned about this phenomena. Remember that because you only pay when a targeted, prescreened seeker who in the very least meets ALL of your 20 designated criteria and then actually clicks on your ad and visits your website, your exact position within any particular result list is far less important than is your position among the group of companies (potentially including some of your competitors) directly targeting the same exact people you are. 25 That's where your position matters the most. That's where you'll want to "fight" for the best placement you can afford.

In addition, because in no case will bids of a lesser value appear above/ahead of bids of a greater value in ANY result list provided to ANY seeker, as per our rules, no advertiser 30 with a lower bid than you (which bid is, as stated, on their own criteria set) will ever appear above your listing in ANY result list. You invest more; you receive more. No matter what your position on individual result lists are. It's as simple as that. All paid advertisers must have at least one criterion factor 35 in common with seeker and no factors which are contradictory with any of seeker's criteria in order to appear on that seeker's result list. Each generated result list contains any and all advertiser/providers having at least one criterion factor in common with the seeker's criteria/data; where no criteria of 40 any advertiser is a contradiction with any of seeker's criteria/ data. This is how we insure that seekers receive ONLY listings (including yours!) which are relevant to each seeker (and to your website/offer/products/services/etc); and none that aren't.

These rules are exemplary only. Other rules may be readily devised and applied, individually or in combination with each other, as well. For example, as stated, instead of being the preferred, sole determining listing placement factor, a criteria (characteristics) set bid may in other embodiments be just one 50 of two or more factors used to determine placement within (a) result(s) list(s). By way of example and not limitation, such other result list placement factors could include an ads actual or projected popularity and/or click through rate (CTR), popularity and/or importance and/or desirability of various 55 criteria to the seeker(s) and/or advertiser(s) and/or system operator(s), relationship of an/the advertiser(s) and/or seeker to the system operator, advertiser cost of one or more of the criteria (i.e. where the inclusion of particular higher cost/ higher value criteria results in even higher result list place- 60 ment), seekers geographic location relative to one or more of the advertisers, credit standing of the advertisers (relative to each other and/or to some established standard, their DUNN & BRADSTREET or FICO scores), length of time advertisers have been utilizing system, total money spent (i.e. over a 65 specific time period and/or length of a contract) by advertisers, past match queries (i.e. frequency of, number/choices of

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ads/listings clicked on, time spent reviewing, number/types of ads/listings displayed), etc. Indeed, as can now be appreciated, the placement factors (weighted and/or unweighted)/rules possibilities may be virtually limitless.

Accordingly, no effort will be made here to attempt to list every possible set of weighted and/or unweighted factors and rules which may be implemented and utilized to determine advertiser/advertisement placement within seeker result lists. It is understood that numerous modifications and variations may be readily devised given the above and herein description of the principles of the invention. All such modifications and variations are well within the spirit and scope of this invention, as it is defined in the claims.

Also, though not preferred embodiments, result lists may contain only listings where, e.g., a minimum of one—or some/any other number of—criterion factors must match among/between the advertisers and/or the seekers (or where a certain number of particularly specified criteria factors must match up) in order to appear on a result list. Or, in still another embodiment, positional bidding could be conducted not exclusively between advertisers sharing the same criteria set; but instead be conducted between all advertisers who have one, two, three, four, etc; or at least one (or at least two, at least three, at least four, etc) criterion in common with each other, e.g., where each individual criterion an advertiser wanted to target could be bidded individually, then "algorithmically combined" (or combined in some other manner) to arrive at "current ranking" and "bid to become #1" figures:

Or, bidding could be conducted among all advertisers having at least a given advertiser's criteria factor set. Or, some "point value" methodology could be employed (with or without algorithms), where values are assigned to each criterion factor based on each factor's relative importance/value to the set of criteria as a whole or to some other existing and/or created benchmark (or even correlated to each [other] factor individually for value determination). In still another embodiment, the advertisers could be required to select some minimum number of criteria for their criteria set; and/or have some criteria cap on the number of criteria they may select. Or, their criteria set may be required to contain one or more particular rule-required criteria (i.e. one or more zip codes, an income range, familial size, marital status, etc). Indeed, as can now be appreciated, the competitive bidding possibilities may be virtually limitless.

Accordingly, no effort will be made here to attempt to list every possible set of bidding and other factors and rules which may be utilized to determine advertiser/advertisement placement within seeker result lists. It is understood that numerous modifications and variations may be readily devised given the above and herein description of the principles of the invention. All such modifications and variations are well within the spirit and scope of this invention, as it is defined in the claims.

Referring now again to FIG. 7, where the bid amounts among the paid advertisers are in monetarily ranked order; but not (excepting as between listings 710c and 710d) in "monetarily tight" sequential order. That is, though listed from highest bid to lowest based strictly on bid amounts as is the preferred embodiment, the actual amounts between each listings' bids are neither \$0.01 nor some other system-operator-required monetary distance apart. GM is in first position with a \$7.00 bid, yet, while Toys R Us is in 2<sup>nd</sup> position, their bid is not even \$6.80+. The differences between 750b and 750c, and between 750f and 750g, are greater still. This is what result lists will typically look like in a preferred embodiment of the present invention, where each advertiser simply bids only against other advertisers targeting the same exact criteria set as they are not against other criteria sets, e.g., all

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advertisers sharing at least one common criterion but no conflicting criteria (which embodiment, while possible to implement, would be unwieldy, complicated and difficult to manage given the large number of variables involved). The advertisers chose their bid amounts based on what positions they desired for their own selected criteria set. Though irrelevant to the operation of the system; note that, over time, especially as the system's utilization expands beyond 100, 000+ advertiser/providers, these monetary variations between positions on result lists will generally narrow.

Let us now take a look at how, working from the previously detailed result list placement rules, the six paid listings of FIG. 7 may have come to be listed in the order depicted (establishing scenarios so as to determine exactly why they are listed so would limit the exploration of multiple aspects of the above rules and the present invention and is therefore not pertinent to our discussion here):

First; we know that all the listed advertisers have at least one criterion factor in common with the seeker while having 20 no criterion factors which conflict with/contradict those of the seekers. Accordingly, one or more of these advertisers' criteria sets could, for example, consist entirely of any one of seeker's criterion factors, e.g., just "females," just "age 37" (or "35-40" etc), just "those with \$50,000-\$74,999 total 25 household income," etc. Or two criterion factors, e.g. "female"+"35-40," "CA resident+enjoys sports," "female+ enjoys sports," etc. Or three factors, etc; up to this seekers total of six criteria factors. In effect, each individual advertiser's criteria set may consist of any number of, in any com- 30 bination, of this seeker's total criteria set (or more, as explained below), as depicted, consisting of: Female, age 37, \$50,000-\$74,999 THI, minor children in household, CA resident, and enjoys sports.

Contradicting criteria (which negate the listing of otherwise qualified-to-be-listed-advertisers in a result list for a given seeker) are those criteria which, by their nature, eliminate or "cancel out" one or more of the unique demographic, geographic, and/or psychographic factors unique to each seeker. Contradicting criteria, in effect, render meaningless these unique criteria factors. Using our example seeker for illustration; contradicting criteria would include if the seeker were male, any age but age 37 (or any age range which does not include 37), had any total household income besides \$50,000-\$74,999, had no minor children in household, was a resident of any state other than California, and who dislikes sports.

This means that, even if an advertiser's criteria set included female, age 37, \$50 k-\$74,999 THI, and CA resident (5 of the seeker's 6 criteria); but which also included those women 50 who dislike sports; this advertiser's listing would not be included in this seeker's result list. "Dislikes Sports" contradicts "Likes Sports." The seeker probably doesn't want to see listings targeted to women like her but who don't like sports anyway; and in any case, this advertiser has already indicated 55 they want to reach only such women who do not like sports. They've already said, by their choice of criteria, that they want to target—and only pay for—those 37 year old women with \$50 k-\$74,999 THI having minor children in the household who live in California who dislike sports. Not those who 60 like sports. In a similar manner; an advertiser who is targeting age 37, CA resident, enjoys sports, Males would also not appear on this seeker's list, as a result of the contradicting criterion "Male." Nor would an advertiser appear whose set includes female, age 37, minor children in household, enjoys 65 sports; but where the household income is a contradicting \$75,000.

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Now, if any of these displayed advertisers' criteria sets had consisted of from one to six of this seeker's criteria factors plus one or more additional criterion factors (conflicting or not), under our operating rules, their listing would not have appeared; due to advertisers desire for greater specificity and/or different (though similar) targeting. Therefore, if one or more of the six paid advertisers' criteria sets had consisted of one or more from the set of female, age 37, \$50 k-\$74,999 THI, minor children in household, CA resident, and enjoys sports but also included, e.g. "was in the military," "enjoys reading," "enjoys horseback riding," "has asthma," "wants to buy a computer," "has a dog," etc, their listing would not have appeared. Because the advertiser(s) wouldn't be getting (all) what they were looking for in such a scenario, they don't have to (and wouldn't want to anyway) pay for a listing to be presented to this particular seeker.

Now specifically (looking again to FIG. 7); perhaps General Motors is targeting (and so their criteria set therefore consists of) just females. Or females who live in California. 37 year old females who enjoy sports. Females with minor children in the household. Maybe they're looking for 37 year old CA females with minor children. Or 37 year old CA residents who enjoy sports (note here that, by GM indicating their offer is for men OR women [by not making "females" one of their chosen criteria], their listing will appear for both women and men who live in CA, are 37 years old, and who like sports). In all these scenarios, GM would appear on the FIG. 7 seeker's result list. If, however, GM specified "Males" as part of any of these otherwise "qualified" criteria sets; because such criteria would then contradict seeker's, their listing would not appear for this female seeker.

In the event GM's criteria set included from one to all six of the same six criteria as this seeker plus one or more additional criteria, e.g. "Regularly uses their American Express Card," "Listens to Music," "Has a Dog" etc; because GM is more specific (and targeting differently if less than six of their criteria matches seeker) in its targeting than is seeker, seeker would not see this GM listing. GM wants in this case to be more targeted/specific than seeker is; making this seeker "ineligible" to know about GM's listing/offer. As this illustrates, in many cases it may be in the advertisers best interest to specify just the minimum number of targeting criteria as is truly consistent with their offer/listing/company in order to maximize the number of likely customers/clients for their products, services, and benefits. With this system's pinpoint targeting accuracy, it would be easy to get carried away by selecting more criteria than is really required; resulting in unnecessary lost business.

Why is GM in the first/top position in this seeker's list? Under our rules, it's not because they've bid the most to be so; but because GM has the highest bid amount of all the paid advertisers who qualified to be displayed to this particular seeker. What GM's top position additionally tells us is that they also hold the top position among those advertisers targeting the same (and therefore who are "competing" with GM) criteria set as GM is. This is so because, since GM's criteria set got them on this seeker's list, all other advertisers sharing the same set as GM must by logic and necessity also appear in this seeker's list, since, if GM "matches up" with this seeker, everyone sharing GM's criteria set also "matches up" with this seeker. What we can't tell from this list, though, is just what GM's criteria set is; as it could be any type and number of criteria which qualifies the seeker to view GM's listing under our rules. Such targeting secrecy (and click fraud reducing) is obviously very valuable and desirable to advertisers; and is another of the many unique features and benefits of the present invention.

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The remaining five paid advertisers of FIG. 7 are in the order they are, as with GM, only because of the bid amounts they are paying for whatever positions each of them have selected in competition with other advertisers targeting the exact same respective criteria set as each of these five are. 5 What we can discern, however (given that most seekers will have result lists totaling some 100+ listings once system has been in operation for a short while), is that all five hold very high places among their specific, respective criteria set in order to show up in the top six paid positions on this list. 10 Indeed, given the amazingly wide range of available criteria sets for advertisers to choose from, there is a good chance that each of these advertisers may actually hold the top position among all companies competing for each advertisers respective targeted criteria sets; just as we have determined GM is 15 with their criteria set. Additionally, each of these six advertisers (though they all have at least one non-contradictory criterion factor in common with the seeker), may have no criterion factors in common with each other.

For example, GM could be targeting just females with their 20 0% financing offer. Toys R Us, only 37 year olds (and so, males or females) for their offer, Amazon, just those with THI's of \$50,000-\$74,999 for theirs. 24 Hour Fitness, only CA residents. PCH, just those with minor children in the household. RealtyTruth.com, only those who enjoy sports. No criteria in common with each other; yet all would appear on this seeker's result list under the rules of this embodiment. All these advertisers able to reach their targets—and only their targets, no matter what criteria each advertiser selects. And with no one the wiser about what any of them are doing 30 or the markets they're each targeting. That's the profound versatility of the present invention.

Unpaid listing 710e is displayed among the paid listings. Preferably, such unpaid listings—especially those offering high-demand free or very low cost products, services, and 35 benefits such as is often the case with government programs and the like—may be interspersed among the paid listings. In this way, seekers remain highly motivated to review the complete list of all offered products, services, and benefits offered by all the advertisers. "Free" has proven itself over the years 40 be one of the most powerful words in advertising/marketing. Interspersing such listings among the paid listings therefore puts "Free" to its best use; for the benefit of all; seekers, advertiser/providers, and the system operator/administrator. It is to be understood that the displayed PSB listings are in no 45 way limited to any particular type or number of listings.

In a preferred embodiment, hyperlink 770 of FIG. 7 provides seekers with the option to have their profile data saved by the system operator so they won't have to complete the questionnaire(s) again in order to generate the highly-desired 50 updated result lists in the future. Preferably, they are also given the option to receive automatically (or manually) generated result lists at regular time intervals of their (or optionally system operator's) choosing. Given the dynamic, constantly-changing (e.g., often time-sensitive and availability/ 55 supply limited) nature of both "everyday" as well as government product, service, and benefit offerings; when combined with the pinpoint targeting/matching of entities with the advertisers offerings as provided by the present invention, such entity-requested updated and accurate-to-the- 60 minute result lists will likely be desired no less than at least daily by these anxious-and curious-entities. Daily review and consideration of "who's offering me/us/my company/my city what; when; and for how long" will one day be as ubiguitous as the morning newspaper or cup of coffee. While such 65 data storage and automated updating methodologies are well know to the arts; the architecture for and procedures to imple32

ment this data storage and automated updating are not conventional in the bidded-position, pay-for-performance system of matching providers with seekers as detailed herein.

Though shown in FIG. 7 for clarity and explanatory purposes, the preferred embodiment is that the advertisers' bid amounts not be shown. Unlike as is the case with the Internet search field/industry, where questions have been regularly raised as to how the order of search results are determined (especially so in the early years of search); the current invention has no such editorial integrity issues. Seekers know what's "going on," what to expect, and what the match result lists are revealing to them. Other media doesn't display what advertisers have paid for their placements; it preferably shouldn't be done with the present invention, either.

Also preferably, if two PSB listings with the same criteria sets also have the same bid amount, the bid that was received earlier in time will be assigned the higher rank value. Alternatively, a minimum monetary bid increment "distance" (\$0.01, \$0.05, etc) between bids to eliminate ties from occurring may optionally be required.

It is to be understood that while presenting results lists to seekers whereby the paid advertisers are listed strictly in highest-to-lowest descending order based on their respective criteria-set bids is the preferred embodiment (and, as stated, optionally yet preferably with unpaid listings being interspersed among the paid listings); in an alternative embodiment, they may be listed and displayed in any order deemed suitable by the system operator, as long as the advertisers' bids are at least one of the factors in the determination of the order in which the advertisers appear in results lists.

In another embodiment, the PSB listings may be categorized and presented to the seeker in a "segmented-by-subjectmatter" manner, e.g., under one or more categories/classes and/or sub categories/sub classes such as "Housing," "Employment," "Education," "Vacation/Recreation," "Government," etc. In a preferred embodiment of this option (ideally, subject to editorial review in order to insure relevancy) the categories in which their PSB listings/offerings are to appear may be self-selected by the advertisers themselves (preferably via account management menu 170 of FIG. 2). Alternatively, the system administrator may itself categorize the listings in this or a related manner; manually or automatically. In the event such categorization is utilized, the preferred embodiment is that, to the greatest extent possible in order to maintain the relative "positional/monetary strength" of and between the advertisers, rankings and listing positions change no more than is necessary when instituting such categorization e.g., with the advertisers continuing to be listed in descending order; highest bid at the top, lowest at the bottom. Such categorization may make it easier for some entity PSB seekers to review the products, services, and benefits being offered to them by the providers/advertisers; particularly as, once launched, the inventions use continues its rapid expansion in the years to come. Alternatively, any and all other various types and forms of results ordering/positioning and presentation to seekers are also well within the scope of the present invention; including, as above, the option of having the listing order of the advertisers not be based solely on the advertisers' bid amounts.

As shown in the campaign management menu 170 of FIG. 2, several choices are presented to the advertiser to manage PSB criteria. First, in the "Change Bids" selection, the advertiser may change the bid of PSB criteria currently in the account. The process invoked by the system for the change bids function is shown in FIG. 8. After the advertiser indicates the intent to change bids by selecting the "Change Bids" menu option, the system searches the user's account in the

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database and displays the PSB criteria(s) for the entire account or a default subaccount in the advertiser's account, as shown in step 810. PSB criteria may be grouped into subaccounts defined by the advertiser and may comprise one or more PSB criteria. Only one subaccount may be displayed at a time. The display should also preferably permit the advertiser to change the subaccount selected, as shown in step 815. The screen display will then show the PSB criteria for the selected subaccount, as indicated in step 820.

An example of screen display shown to the advertiser in 10 step 810 is shown in FIG. 9 and will be discussed below. To change bids, the advertiser user may specify new bids for PSB criteria for which the advertiser already has an existing bid by entering a new bid amount into the new bid input field for the PSB criteria. The advertiser-entered bid changes are displayed to the advertiser at step 820 of FIG. 8 as discussed above. To update the bids for the display page, the advertiser requests, at step 830 of FIG. 8, to update the result of changes. The advertiser may transmit such a request to the account management server by a variety of means, including clicking 20 on a button graphic.

As shown in step **840** of FIG. **8**, upon receiving the request to update the advertiser's bids, the system calculates the new current bid amounts for every PSB criteria displayed, the rank values, and the bid amount needed to become, preferably, the 25 highest ranked PSB listing matching the PSB criteria field (optionally, the bid amount[s] needed to become the n<sup>th</sup> ranked PSB listing may [also] be provided to and selected by the advertiser e.g., 3<sup>rd</sup> highest, 5<sup>th</sup> highest, 10<sup>th</sup> highest, 25<sup>th</sup> highest, etc). Preferably, the system then presents a display of 30 changes at step **850**. After the user confirms the changes, the system updates the persistent state by writing the changes to the account in the database.

The PSB criteria data is displayed in tabular format, with each PSB criteria set corresponding to one row of the table 35 900. The PSB criteria 902 is displayed in the leftmost column, followed by the current bid amount 904, and the current rank 905 of the PSB criteria. The current rank is followed by a column entitled "Bid to become #1" 906, defined as the bid amount needed to become the highest ranked for the displayed PSB criteria set; and "New Bid" column 907. This rightmost column 907 of each row comprises one or more new bid input fields 908 which is set initially to the current bid amount.

As shown in FIG. 9, the PSB criteria listings may be dis- 45 played as "subaccounts." Each subaccount comprises one PSB criteria set/group, with multiple subaccounts residing within one advertiser account as needed. Each subaccount may be displayed on a separate display page having a separate page. The advertiser should preferably be able to change the 50 subaccount being displayed by manipulating a pull-down menu 910 on the display shown in FIG. 9. In addition, PSB criteria sets that cannot be displayed completely in one page may be separated into pages which may be individually viewed by manipulating pull-down menu 920. Again, the 55 advertiser should preferably be able to change the page displayed by clicking directly on a pull-down menu 920 located on the display page of FIG. 9. The advertiser may specify a new bid for a displayed PSB criteria set by entering a new bid amount into the new bid input field 908 for the PSB criteria 60 set. To update the result of the advertiser-entered changes, the advertiser clicks on button graphic 912 to transmit an update request to the account management server, which updates the bids as described above.

Many of the other selections listed in the "Account Management" menu 170 of FIG. 2 function as variants of the "Change Bid" function described above. For example, if the 34

advertiser selects the "Change Rank Position" option, the advertiser may be presented with a display similar to the display of FIG. 9 used in the "Change Bid" function. However, in the "Change Rank Position" option, the "New Bid" field 907 would be replaced by a "New Rank" field, in which the advertiser enters the new desired rank position for a PSB criteria. After the advertiser requests that the ranks be updated, the system then calculates a new bid price by any of a variety of algorithms easily available to one skilled in the art. For example, the system may invoke a routine to locate the PSB criteria in the match engine database having the desired rank/PSB criteria combination, retrieve the associated bid amount of said combination, and then calculate a bid amount that is N cents higher; where N=1, for example. After the system calculates the new bid price and presents a read-only confirmation display to the advertiser, the system updates the bid prices and rank values upon receiving approval from the advertiser.

The "Modify Listing Component" selection on Account Management menu 170 of FIG. 2 may also generate a display similar to the format of FIG. 9. When the advertiser selects the "Modify Listing Component" option, the advertiser may input changes to the URL, title, or description of a PSB criteria via web-based forms set up for each PSB criteria. Similar to the process discussed above, the forms for the URL, title, and description fields may initially contain the old URL, title and description as default values. After the advertiser enters the desired changes, the advertiser may transmit arequest to the system to update the changes. The system then displays a read-only confirmation screen, and then writes the changes to the persistent state (e.g., the user account database) after the advertiser approves the changes.

A process similar to those discussed above may be implemented for changing any other peripheral options related to PSB listing; for example, changing the matching options related to bidded PSB criteria. Any recalculations of bids or ranks required by the changes may also be determined in a manner similar to the processes discussed above.

In the "Delete Bidded PSB Criteria Term" option, the system retrieves all of the PSB listings in the account of the advertiser and displays the PSB listings in an organization and a format, similar to the display of FIG. 9. Each PSB criteria entry may include, instead of the new bid field, a check box for the advertiser to click on. The advertiser would then click to place a check (X) mark next to each PSB criteria to be deleted, although any other means known in the art for selecting one or more items from a list on a web page may be used. After the advertiser selects all the PSB criteria to be deleted and requests that the system update the changes, the system preferably presents a read-only confirmation of the requested changes, and updates the advertiser's account only after the advertiser approves the changes. The "deleted" PSB criteria is/are removed from the match engine, database 36 and will not appear in subsequent match requests. However, the PSB criteria will remain as part of the advertiser's account record for billing and account activity monitoring purposes.

In the "Add Bidded PSB Criteria" option, the system provides the advertiser with a display having a number of entry fields corresponding to the elements of PSB criteria. The advertiser then enters into each field information corresponding to the respective PSB listing element, including the PSB criteria, the web site URL, the web site title, the web site description, and the bid amount, as well as any other relevant information. After the advertiser has completed entering the data and has indicated thus to the system, the system returns a read-only confirmation screen to the advertiser. The system then creates a new PSB listing instance and writes it into the

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account database and the match engine database upon receiving approval from the advertiser.

Preferably, the "Account Management" menu 170 of FIG. 2 provides a selection for the advertiser to "Get Suggestions On Bidded PSB Criteria". In this case, the advertiser enters (a) bidded PSB criteria into a form-driven query box (or other known means for selecting one or more from a given set of choices) displayed to the advertiser. The system reads the PSB criteria entered by the advertiser and generates a list of additional related PSB criteria to assist the advertiser in locating criteria relevant to the content of the advertiser's web site and/or offerings. Preferably, the additional criteria are generated using methods such as a string matching algorithm applied to a database of bidded criteria and/or a thesaurus database implemented in software. The advertiser may select 15 criteria to bid on from the list generated by the system. In that case, the system displays to the advertisers the entry fields described above for the "Add Bidded PSB Criteria" selection, with a form for entering a PSB listing for each criterion/ criteria (set) selected. Preferably, the selected criteria is 20 inserted as a default value into the form for each PSB listing. Default values for the other PSB listing components may also be inserted into the forms if desired.

The "Account Management" menu 170 of FIG. 2 also preferably provides advertisers with a "Project Expenses" 25 selection. In this selection, the advertiser specifies a PSB listing or subaccount for which the advertiser would like to predict a "daily run rate" and "days remaining to expiration." The system calculates the projections based on a cost projection algorithm, and displays the predictions to the advertiser 30 on a read-only screen. The predictions may be calculated using a number of different algorithms known in the art. However, since the cost of a PSB listing is calculated by multiplying the bid amount by the total number of clicks received by the PSB listing at that bid amount during a speci- 35 fied time period, every cost projection algorithm must generally determine an estimated number of clicks per month (or other specified time period) for a PSB listing. The clicks on a PSB listing may be tracked via implementation of a software counting mechanism as is well known in the art. Clicks for all 40 PSB listings may be tracked over time, this data may be used to generate estimated numbers of clicks per month overall, and for individual PSB criteria. For a particular criteria, an estimated number of match requests per day is determined and is multiplied by the cost of a click. This product is then 45 multiplied by a ratio of the average number of clicks over the average number of impressions for the rank of the PSB listing in question to obtain a daily run rate. The current balance may be divided by the daily run rate to obtain a projected number of days to exhaustion or "expiration" of account funds.

One embodiment of the present invention bases the cost projection algorithm on a simple predictor model that assumes that every PSB criteria performs in a similar fashion. This model assumes that the rank of the advertiser's PSB listing will remain constant and not fluctuate throughout the 55 month. This algorithm has the advantages of being simple to implement and fast to calculate. The predictor model is based on the fact that the click through rate, e.g. the total number of clicks, or referrals, for a particular PSB listing, is considered to be a function of the rank of the PSB listing. The model 60 therefore assumes that the usage curve of each PSB criteria, that is, the curve that results when the number of clicks on a PSB listing is plotted against the rank of the PSB listing, is similar to the usage curve for all PSB criteria. Thus, known values extrapolated over time for the sum of all clicks for all 65 criteria, the sum of all clicks at a given rank for all criteria, and the sum of all clicks for the selected criteria may be employed

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in a simple proportion to determine the total of all clicks for the given rank for the selected criteria. The estimated daily total of all clicks for the selected criteria at the selected rank is then multiplied by the advertiser's current bid amount for the criteria at that rank to determine a daily expense projection. In addition, if particular criteria or classes of criteria are known to differ markedly from the general pattern, correction values specific to the criteria, advertiser, or other parameter may be introduced to fine-tune the projected cost estimate.

Finally, the "Account Management" menu 170 of FIG. 2 provides several selections to view information related to the advertiser's campaigns. The "View Subaccount Information" selection displays read-only information related to the selected subaccount. The "View PSB Criteria List" selection displays the list of the advertiser's selected criteria along with the corresponding URLs, bid price, and rank, with the criteria preferably grouped by subaccount. The advertiser may also view current top bids for a set of criteria selected from a list of criteria from a read-only display generated by the system upon receiving the requested criteria from the advertiser.

For an advertiser who requires a more comprehensive report of PSB listing activity, the "View Report" option may be selected from the Advertiser Main Page 120 of FIG. 2. In an embodiment of the present invention, the "View Report" options generate reports comprehensive for up to one year preceding the current date. For example, daily reports are available for the each of the immediately preceding 7 days, weekly reports for the preceding four weeks, monthly reports for the preceding twelve months, and quarterly reports for the last four quarters. Additional reports may also be made available depending on advertiser interest.

Other predefined report types may include activity tracked during the following time periods. Since Inception of the Account, Year To Date, Yearly, Quarter To Date, Month To Date, and Week to Date. Report Categories may include a Detail Report, viewable by Advertiser Account, by PSB Criteria, and by URL, and a Summary Report, viewable by Advertiser Account and by Subaccount. The reports may include identification data such as advertiser account and subaccount name, the dates covered by the report and the type of report. In addition, the reports may include key PSB listing account data such as current balance, pending current balance, average daily account debit, and run rate.

Furthermore, the reports may also include key data, such as: PSB criteria, URLs, bids, current ranks, and number of clicks, number of match requests done for the PSB criteria, number of impressions (times that the PSB listing appeared in a PSB match result list), and click through rate (defined as Number of Clicks/Number of Impressions). Preferably, the report is available in at least HTML view options for viewing via a browser program, printing, or downloading. Note, however, that other view options may be made available, such as Adobe Acrobat, PostScript, ASCII text, spreadsheet interchange formats (e.g., CSV, tab-delimited), and other well-known formats.

When the advertiser has selected the "View Report" option, the system invokes a function which displays a list of available report types, dates, categories, and view options. The system preferably creates a report instance with the following fields, all of which are initially set to null: report type, report date, report category, and view option. Once the advertiser has defined the parameters described above, the system invokes a function to generate the requested report, based on the advertiser-set parameters, and to display the report, based on the view option parameter.

Finally, a preferred embodiment of the present invention implements an option for context specific help that the adver-

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tiser may request at any time the advertiser is logged in. The help option may be implemented as a small icon or button located on the system generated display page. The advertiser may click on the icon or button graphic on the display page to request help, upon which the system generates and displays a help page keyed to the function of the particular display the user is viewing. The help may be implemented as separate display pages, a searchable index, dialog boxes, or by any other methods well known in the art.

Given the above description of an overall approach to the Match Engine Marketing (Paid Match) service of the present invention, specific non-claim-limiting examples of different criteria (characteristics) bid sets by various potential advertiser/providers will now be described:

#### Example I

General Motors decides to test a special financing program ONLY to everyone who currently owns a non-GM automobile AND who lives in Florida AND who has minor children at home AND who is 18-49 years old AND lives within 20 miles of one of their Florida dealerships. This criteria set costs them only \$7 for the top position, for each of their clicks/referrals; a bargain considering their average lead cost for their dealer network runs almost \$80. Because they were able to pinpoint target their offer in this way, the millions of other existing (and potential) GM customers weren't upset that they weren't offered the same special financing this group was. As a result of how other marketing/media options operate, until now, this "non-targeted market awareness" and resultant anger and disappointment was often a big headache for GM. Not anymore.

#### Example II

Sees Candy geographically pin-point offers a buy-one-getone-free coupon only to people living in those four zip codes closest to each of their 432 stores AND who haven't bought Sees candy in the last 12 months. They pay just \$3.55 (for criteria set position number five) for each click/lead. Since only two boxes of candy pays for both the lead and the coupon; given the excellent repeat and word-of-mouth sales new customers generate, this is the most affordable advertising they've ever done.

#### Example III

Publisher's Clearing House is looking for a new way to bring in subscribers for their 100+ magazine and product suppliers and decides to use the system for an A/B split test; 50 something they're well familiar with. To do so, they divide up the 40,000 national zip codes in half (on an "every other one" basis to insure result accuracy), making two different offers to each of the two sets of recipients. Paying only \$2.68 (list position #13) per click/lead, they discover to their amazement 55 that their ROI is almost three times that of direct mail.

#### Example IV

Amazon.com decides to take their 25 top selling \$50-\$200 60 non-book products and tailor a criteria set unique to each product, based on the profile of those most likely to have bought each product in the past. The results? Paying just \$3.10/click/lead for a positional average of five over all the products; their national advertising cost of sale is running 65 44-76% (depending on product) less than any other media they've ever used before.

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#### Example V

Tiffany has designed an exclusive new line of high-end (\$25,000+/piece) jewelry they want to sell over the Internet and by phone to those not living within driving distance of one of their stores; yet are tired of all the logistical difficulties of placing ads in overpriced, multi-month lead times, hard-tomeasure-results, hit-or-miss magazines. Instead, they pay only \$9.72 for the #1 spot with the following criteria: Household income of \$100,000+ AND have high-speed Internet access at home or work AND already own at least \$50,000 in jewelry AND have a net worth of at least \$500,000 excluding their principle residence. The result? Though it's early in the campaign, their cost of sale is averaging less than a third of what they usually spend-just \$3,500 per piece. While this amount may sound high, given that these pieces average a whopping 100% markup (as is common in the industry), it's actually almost like printing money.

#### Example VI

A small, local company, Wonderful Weddings, only provides their services to those in the Thousand Oaks, Westlake Village, and Agoura areas. Accordingly, they select the following criteria: Zip Codes 91359, 91360, 91361, 91362, and 91301+ Females (men rarely make wedding decisions, so why pay to reach them?)+Getting married within the next six months (how many newspaper readers does this attribute ever apply to?). Since they average \$15,000 in products and services sold per wedding, they're only too happy to be paying \$2.97/click/lead (criteria set position 7) to reach only their target market.

### Example VII

AT&T is launching an exciting new DSL service to the business community and wants to move quickly before their tough competitors get wind of it. As a test, they initially target every 10th zip code (an Nth sort); giving them 4000 zip codes worth of businesses at a B2B cost of just \$8.32 per click/lead (since they want to reach all businesses regardless of employee count, revenue, facilities location(s), industry sector, products/services offered, etc, they've decided to not use any other firmographic criteria on this offer). This buys them the top position. They realize within the first 15 days that this new (avg. \$1,000+/year/business) service is their biggest winner yet, and so immediately roll their offer out to all 40,000 US zip codes; now paying \$8.57 per click/lead. By the time their competitors get hold of the offer and try to come up with something to counter AT&T, it's already too late. SBC, Verizon, Southwest Bell, and the rest never knew what hit

As these are just a few examples of the virtually limitless use possibilities for the present invention, it is to be understood that these Examples are of course not intended to, and should accordingly not be used to, either limit the scope of the claims or to limit the invention to either any particular embodiment(s) or to (a) precise form(s).

#### CONCLUSION

While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiment, it is to be understood that the invention is not to be limited to the disclosed embodiment. This description is not intended to be exhaustive or to limit the invention to the precise form disclosed.

As should now be readily apparent, the unobvious and unexpected, superior results present invention clearly and convincingly takes the matching of advertisers with their entity targets to a whole new and exciting, powerfully effective, highly profitable and premier level by providing the world's first and only real or substantially real time pay for performance characteristics-targeted marketing vehicle. As the ground-breaking GoTo patent (U.S. Pat. No. 6,269,361) did for its new "paid search" industry; the present invention is itself the foundational force set to lead the way to another 10 exciting new national and international industry. Welcome to the birth of revolutionary new frictionless advertising, to be heretofore known as Match Engine Marketing<sup>TM</sup>/Paid Match<sup>TM</sup>.

The many features and advantages of the groundbreaking 15 present invention are apparent from the detailed, clarity-andunderstanding-providing specification. Furthermore, since numerous modifications, variations, changes, and alterations will readily occur to those skilled in the arts once this invention is known to the arts, it is not desired that the present 20 invention be limited to the exact constructions, operations, and implementations illustrated and described herein; and accordingly, all suitable modifications, variations, and equivalents which may be resorted to are intended to fall within the true spirit, concept, and scope of the invention and 25 prising: its claims and their legal equivalents; including where any bidding on, and/or payment(s) based on, entity criteria/characteristics is resorted to.

What is claimed is:

1. A method of generating a product/service/benefit result 30 list in response to a match request from a PSB seeker using in whole or in part a computer-compatible network, comprising:

maintaining a database including a plurality of PSB listings, wherein each PSB listing is associated with a PSB provider, at least one PSB criteria factor, and a modifi- 35 able bid amount that is independent of other components of the PSB listing, the bid amount being associated with at least one of the PSB and the PSB provider, the bid amount corresponding to a money amount that is deducted from an account of a PSB provider associated 40 with the PSB upon receipt of a request of at least one of information about the PSB provider or the PSB itself;

receiving a PSB match request, which includes seeker criteria information, from the PSB seeker;

generate a match with the PSB match request;

ordering the identified PSB listings into a PSB result list in accordance with the values of the respective bid amounts for the identified PSB listings;

receiving a retrieval request from the PSB seeker to retrieve 50 information associated with a PSB listing in the result

recording a retrieval request event including account identification information corresponding to the PSB provider, to permit maintenance of accurate account 55

- 2. The method of claim 1, further comprising the step of updating a listing in the listing database in response to a request from a provider.
- 3. The method of claim 1, further comprising the step of 60 including on the result list one or more listings having no bid or zero bid amount.
- 4. The method of claim 3, wherein said listings include one or more search result listings.
- 5. The method of claim 1, wherein the account database 65 comprises at least one account record for each of a plurality of providers, said account record including

at least one listing having listing criteria and a bid amount, an account balance; and

a unique account identifier.

- 6. The method of claim 5, wherein the listings in the account record are organized into at least one subaccount within the account record.
- 7. The method of claim 5, further comprising the step of including on the result list one or more listings having no or zero bid amount.
- 8. The method of claim 5, wherein the retrieval request event comprises the criteria and the bid amount of the listing, and an account identifier associated with the listing.
- 9. The method of claim 8, wherein the retrieval request event further includes a rank value.
- 10. The method of claim 8, wherein the retrieval request event is linked to the account record having an account identifier that corresponds to the account identifier listed on the retrieval request event.
- 11. The method of claim 10, wherein the bid amount of the retrieval request event is charged to the account balance of the account record having an account identifier that matches the account identifier of the retrieval request event.
- 12. A method of generating an advertising presentation using at least in part a computer-compatible network, com
  - maintaining a database including a plurality of advertisements, wherein each advertisement is associated with a provider and a modifiable bid amount that is independent of other component(s) of the advertisement, each advertisement being searchable;
  - identifying the advertisement(s) having demographic and/ or psychographic and/or firmographic criteria which generate at least a partial match with an entity;
  - arranging the identified advertisement(s) into said advertising presentation at least in part in accordance with the values of the respective bid amounts for the identified advertisement(s).
- 13. The method of claim 12, wherein the estimated cost of an advertisement for a specified time period is calculated as a product of at least the current bid amount of the advertisement and a projected number of times the advertisement is expected to be viewed and/or selected by an entity within a specified time period.
- 14. A method of generating a result list in response to a identifying the PSB listings having PSB criteria which 45 match request from a seeker using a computer network, com
  - maintaining a database including a plurality of listings, wherein each listing is associated with criteria and a modifiable bid amount that is independent of other components of the listing;

receiving a match request from the seeker;

- identifying the listings having criteria which generates a match with the match request;
- ordering the identified listings into a result list in accordance with the values of the respective bid amounts for the identified listings;
- receiving a retrieval request from the seeker to retrieve information associated with a listing in the result list;
- generating a listing activity report including information on retrieval requests received from seekers.
- 15. An apparatus having stored thereon at least:
- at least one database having at least one account record for each of a plurality of advertising providers, the account record including:
- at least one listing corresponding to at least one criteria, a modifiable bid amount that is independent of other components of the listing, a locator corresponding to the

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address/location of a document residing on a network server, a description, and a title;

an account balance:

a history of listings included in the advertising provider's account record;

payment processing information, wherein said payment processing information is accessible to a network and isolated from public access; and

a payment history;

programming code for providing the advertising provider with login access in response to authentication, wherein the advertising provider's login access grants the advertising provider access to modify the advertising provider's account, the advertising provider not being provided with access to modify the accounts of others;

programming code for adding money to the account of an advertising provider upon receiving a request from said advertising provider;

programming code for adding a listing to an account of an advertising provider upon receiving a request from said 20 advertising provider;

programming code for deleting a listing to an account of an advertising provider upon receiving a request from said advertising provider;

programming code for modifying the listing of an advertising provider upon receiving a request from said advertising provider;

programming code for generating an activity report for an advertising provider upon receiving a request from said advertising provider;

programming code for receiving a match request from a device, the request including at least one criteria, the request being received from a device;

programming code for generating a result list in response to the match request, the result list including listings from the accounts on the database, wherein the criteria for each listing in the result list generates a match with the match request, the listings in the result list arranged in an order determined at least in part by using the bid amounts of the listings.

16. The apparatus of claim 15, additionally comprising: programming code for said criteria to consist of at least one of the following: age, gender, income, marital status, occupation, familial size, familial composition, one or more health or medical conditions or diseases, one or more hobbies, education, housing status, one or more health or medical conditions or diseases, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, 50 population.

17. The apparatus of claim 15, additionally comprising: programming code for said criteria to consist of at least five of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees 60 offered, population.

18. The apparatus of claim 15, additionally comprising programming code for said criteria to include at least five criteria.

19. The apparatus of claim 15, additionally comprising 65 programming code for including one or more search result listings with the match result list.

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20. The apparatus of claim 19, additionally comprising programming code for presenting said search result listings anywhere in relation to said PSB result list; including one or more of before, after, amongst; above, and/or below and/or to either side of said PSB result list.

21. A method of enabling a provider to update information relating to a listing on a result list generated by a matching engine, comprising the steps of:

maintaining an account database having at least one account record for each of a plurality of providers, said account record including

at least one listing having criteria and a modifiable bid amount that is independent of the other components of the listing; and

an account identifier;

receiving from a provider a change request for a listing in the provider's account;

updating the listing in the provider's account record in response to the change request;

determining a position for the updated listing in a result list generated by the matching engine in response to a criteria information included match request received from a seeker using the matching engine, where the criteria of the updated listing generates a match with the match request and the position of the updated listing in the result list is determined at least in part by using the bid amount.

22. The method of claim 21, wherein the criteria of each 30 listing in the result list generates a match with the match request.

23. The method of claim 22, wherein the listings in the result list are sorted in order of decreasing bid amount.

24. The method of claim 23, further comprising the step of assigning an ordinal rank value to each listing in the result list in order of decreasing bid amount, with the smallest rank value assigned to the listing in the result list having the highest bid amount, and the largest rank value assigned to the listing having the lowest bid amount.

25. The method of claim 23, further comprising the steps of determining creation time value for each listing in the account database;

identifying listings within a result list having equivalent bid amounts; and

within a group of listings within a result list that have equivalent bid amounts, sorting the listings in order from earliest to most recent creation time value.

26. The method of claim 21, wherein the account record further includes an account balance.

27. The method of claim 26, wherein the account balance is positive.

28. The method of claim 26, further comprising the step of subtracting the bid amount from the account balance when a listing is selected by the seeker from the result list.

29. The method of claim 26, where the listing further comprises a web site title, a web site description, and a web site Uniform Resource Locator (URL).

30. The method of claim 29, further comprising the step of recording a retrieval request event when a listing is selected by a seeker from the result list.

31. The method of claim 30, wherein the retrieval request event comprises an account identifier, and a bid amount.

32. The method of claim 31, wherein the retrieval request event further comprises at least one from the group of:

a criteria

a web site URL

a rank value.

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- 33. The method of claim 31, further comprising the step of applying a charge to an account balance, where the charge corresponds to a bid amount recorded in a retrieval request event having an account identifier that matches the account identifier corresponding to the account balance.
- 34. A method of enabling a provider using a computercompatible network to update information relating to a listing within a result list generated by a match engine in response to a match request received from a remote device over the computer-compatible network, comprising the steps of:
  - maintaining an account database having at least one account record for each of a plurality of providers of the computer-compatible network, said account record including an account identifier, and at least one listing having criteria and a modifiable bid amount that is independent of other components of the listing;
  - providing the provider with authenticated login access, wherein the provider's login access permits the provider to modify the provider's account record;
  - modifying listing of the account record upon receiving a request from said provider; and
  - generating a result list comprised of listings wherein the criteria for each listing generates a match with the criteria data included match request, the listings in the result 25 list arranged in an order corresponding in whole or in part to the bid amounts of the listings.
- 35. The method of claim 34, wherein the result list further includes at least one listing having no bid or a bid amount of zero.
- 36. The method of claim 35, wherein said listings include one or more search result listings.
- 37. The method of claim 34, wherein the result list further includes at least one listing that is not included in the account database.
- 38. The method of claim 34, wherein the step of modifying the listing of the account record upon receiving a request from the provider is performed in real time or substantially real time.
- 39. The method of claim 34, wherein the listing further 40 includes a title and a description.
- 40. The method of claim 39, wherein the listing further includes at least one from the group of provider's contact information:

Uniform Resource Locator

E-mail address

Instant messaging address

Phone number

Pager number

FAX number

Physical address.

- 41. The method of claim 34, further comprising the step of, upon seeker selecting at least one of said listings in said results list for which seeker desires more information concerning, being presented with provider's information and/or 55 information concerning provider's offering without being sent or directed to provider's web site.
- 42. The method of claim 34, further comprising the step of adding a listing in real or substantially real time to an account record of a provider upon receiving a request from said provider.
- 43. The method of claim 34, further comprising the step of deleting a listing in real or substantially real time from an account record of a provider upon receiving a request from said provider.
- 44. The method of claim 34, wherein the account record further comprises an account balance.

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- 45. The method of claim 44, wherein the account balance is positive.
- 46. The method of claim 44, further comprising the step of adding in real or substantially real time a money amount to the account balance of the providers upon receiving a request from the providers.
- 47. The method of claim 46, wherein the money amount has been verified by an external financial authorization network
- 48. The method of claim 34, wherein the criteria and the match request each comprise at least one character string.
- 49. The method of claim 34, further comprising the step of generating an activity report for a provider upon receiving a request from said provider.
- 50. The method of claim 34, further comprising the step of estimating a cost of a listing for a specified time period upon receiving a request from a provider.
- 51. The method of claim 50, wherein the estimated cost of 20 a listing for the specified time period is calculated at least as a product of the current bid amount of the listing and a projected number of times the listing is expected to be selected by a at least one seeker in a specified time period.
  - 52. The method of claim 34, wherein the bid amount of a provider's listing comprises a money amount that is deducted from the account balance of said provider's account each time the listing is selected by a remote seeker.
  - 53. The method of claim 34, wherein the listings of the providers in the result list are sorted in decreasing order from highest to lowest bid amounts.
  - 54. The method of claim 53, wherein an ordinal rank value is assigned in ascending order to each listing of the result list in the sorted order starting at the listing with the highest bid amount, which is assigned the smallest rank value, and ending with the listing with the lowest bid amount, which is assigned the largest rank value.
  - 55. The method of claim 31, further comprising the step of displaying at least some portion of the result list.
  - 56. The method of claim 34, further comprising the step of generating a match listing activity report.
  - 57. The method of claim 34, further comprising the step of suggesting and/or generating alternative match criteria to said provider for at least one of provider's offerings with or without the request of said provider.
  - 58. The method of claim 34, wherein said computer-compatible network is in whole or in part at least one from the group of:

the Internet

an intranet

an extranet

mobile/cell

landline

satellite.

- 59. A method of enabling a provider using at least one computer-compatible network to update information relating to a listing within a result list generated by a matching engine, said method comprising the steps of:
  - maintaining a database having at least one account record for at least one provider using the computer-compatible network(s), said account record including:
  - at least one listing, where each listing includes a criteria field having at least one criteria factor, a modifiable bid amount that is independent of the other components of the listing, a Uniform Resource Locator (URL) corresponding to the address of a document residing on a network server, a description, and a title;

an account balance;

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payment processing information for the provider, said payment processing information maintained isolated from public access via the computer-compatible network(s); payment histories of the provider; and

listing histories of the provider;

providing the provider with login access in response to authentication, wherein the provider's login access permits the provider access to modify the provider's account record, the provider not being provided with access to modify account records of others;

modifying the listing of a provider upon receiving a request from said provider;

receiving a match request, the match request including at least one criteria factor identified from at least one seekers criteria data set, the match request being received over a network from a seekers device; and

generating a result list in response to the match request, the result list including listings of the account records on a computer-compatible network, wherein the criteria for 20 each listing in the result list generates a match with the match request, the listings in the result list arranged in an order determined using at least in part the bid amounts of the listings.

- 60. The method of claim 59, further comprising the step of 25 adding a listing to an account of provider upon receiving a request from said provider.
- 61. The method of claim 59, further comprising the step of deleting a listing from the account record of a provider upon receiving a request from said provider.
- 62. The method of claim 59, further comprising the step of adding a money amount to the account balance of a provider upon receiving a request from said provider.
- 63. The method of claim 62, wherein the money amount has been verified by an external financial authorization net- 35 storing at least some portion of seekers criteria data. work
- 64. The method of claim 59, wherein the criteria comprises at least one character string.
- 65. The method of claim 59, further comprising the step of generating an account activity report for a provider upon 40 receiving a request from said provider.
- 66. The method of claim 59, further comprising the step of estimating a cost of a listing for a specified time period upon receiving a request from a provider.
- 67. The method of claim 66, wherein the estimated cost is 45 calculated as a product of the bid amount of the listing and a projected number of times the listing is selected in the specified time period,
- 68. The method of claim 59, wherein the bid amount of a provider's listing comprises a money amount that will be 50 deducted from the account balance of said provider's account each time the listing is selected.
- 69. The method of claim 59, wherein the rank value is an ordinal value.
- 70. The method of claim 59, wherein the listings of the 55 result list are sorted in decreasing order from highest to lowest
- 71. The method of claim 70, wherein a rank value is assigned to each listing of the result list in the sorted order starting at the listing with the highest bid amount, which is 60 assigned the smallest rank value, and ending with the listing with the lowest bid amount, which is assigned the largest rank
- 72. The method of claim 71, further comprising the step of displaying at least some portion of the result list.
- 73. The method of claim 59, further comprising the step of generating a listing activity report.

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- 74. The method of claim 59, further comprising the step of suggesting or generating alternative match criteria to said provider for at least one of provider's offerings.
- 75. The method of claim 59, further comprising the step of generating at least one additional criteria request after said result list has been generated.
- 76. The method of claim 75, wherein at least one of said listings is only displayed to said seeker upon the providing of at least one additional seeker criteria.
- 77. The method of claim 75, further comprising the step of generating one or more additional result lists upon the providing of at least one additional seeker criteria.
- 78. The method of claim 59, wherein, prior to or in conjunction with the initiation of said match request by said seeker, said criteria data set varies depending upon seekers prior criteria provided from at least one prior criteria data set.
- 79. The method of claim 59, wherein both said bid amounts and the appearance of said listings in said listing results are dependent upon the current and/or future satisfaction of one or more criteria for each of the listings.
- 80. The method of claim 7, wherein listings with no bid amounts or bid amounts of zero are included in said results lists in one of the following manners:
  - at the end of the paid listings, or at the beginning of the paid listings, or among the paid listings.
- 81. The method of claim 59, wherein said bid amounts are required to have a minimum monetary value of separation between themselves.
- 82. The method of claim 59, further comprising the step of arranging and displaying said listings of said results list in one or more categories and/or subcategories.
- 83. The method of claim 59, further comprising the step of
- 84. The method of claim 83, further comprising the step of subsequently generating at least one additional seeker result list based at least in part on seekers stored criteria data.
- 85. The method of claim 84, further comprising the step of selecting how often to generate said updated result list or lists for seeker.
- 86. Computer executable instructions stored on a tangible medium for collecting and analyzing data describing the bid options available for a PSB provider to determine if and/or when and/or where said PSB provider's advertisement(s) will appear, comprising a plurality of PSB bid modules, each capable of collecting bid data from PSB providers, determining the location and/or appearance frequency of said PSB provider's advertisement(s), and providing the information necessary to select the location and/or appearance frequency of said provider's advertisement(s); wherein the location of said provider's advertisement(s) is/are determined at least in part by at least one bid on one or more demographic and/or psychographic and/or firmographic.
- 87. A distributed information match mechanism comprising: means for storing a plurality of provider/advertiser registrations; means for receiving one or more entity demographics and/or psychographics and/or firmographics via a network; means for resolving said entity demographics and/ or psychographics and/or firmographics against each of a plurality of provider/advertiser registrations to determine one or more matching provider/advertiser registrations each indicating a corresponding provider/advertiser information location; means for transmitting; at least in part monetarily determined as a result of one or more auctions of and/or bids on one or more demographic and/or psychographic and/or firmographic; match results to a device.

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88. The distributed information match mechanism as recited in claim 87, further comprising: means for indexing and managing at least one of new, and/or existing, and/or exiting provider registrations from a plurality of provider/ advertisers.

89. The distributed information match mechanism as recited in claim 87, wherein said entity demographics and/or psychographics and/or firmographics consists of at least one of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

90. The distributed information match mechanism as recited in claim 87, wherein said entity demographics and/or psychographics and/or firmographics consists of at least five 20 of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies employee count, industry type/category, revenue, number of locations/branches, sales 25 volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

91. The distributed information match mechanism of claim 87, further comprising: means for including five or more demographics and/or psychographics and/or firmographics.

92. A method comprising: maintaining a database including a plurality of product and/or service and/or benefit listings; wherein at least one product, service, benefit listing is associated with a bid and criteria; receiving a match or combination match/search request from a seeker/searcher; identifying the product and/or service and/or benefit listings having criteria generating a match with said match or combination match/search request; ordering any identified product, service, benefit listings into at least one match or combination match/search result list in accordance at least in part with the values of the respective bids for the identified product, service, benefit listings; receiving a retrieval request from said seeker/searcher to retrieve information associated with a product and/or service and/or benefit listings in the result list or lists.

93. The method of claim 92, wherein said values of the respective bid and/or payment amounts for the identified product, service, benefit listings are only one of two or more 50 factors utilized in determining the order of said listings in said results list or lists.

94. The methods of claims 1, 12, 14, 21, 34, 59, or 92; wherein said criteria consists of one or more of the following: age, gender, income, marital status, occupation, 55 familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, 60 losses, market share, legal structure, student count, student composition, college degrees offered, population.

95. Computer executable instructions stored on a tangible medium comprising:

a database having at least one account record for each of a plurality of advertising providers using a computercompatible network, the account record including: 48

at least one listing corresponding to at least one criteria, a bid amount, a locator corresponding to the address of a document residing on a network server, a description, and a title:

an account balance;

a history of listings included in the advertising provider's account record:

payment processing information, wherein said payment processing information is accessible to the computercompatible network and isolated from public access via the computer-compatible network; and

a payment history;

programming code for providing the advertising provider with login access in response to authentication, wherein the advertising provider's login access grants the advertising provider access to modify the advertising provider's account, the advertising provider not being provided with access to modify the accounts of others;

programming code for adding money to the account of an advertising provider upon receiving a request from said advertising provider,

programming code for adding a listing to an account of an advertising provider upon receiving a request from said advertising provider;

programming code for deleting a listing to an account of an advertising provider upon receiving a request from said advertising provider;

programming code for modifying the listing of an advertising provider upon receiving a request from said advertising provider;

programming code for generating an activity report for an advertising provider upon receiving a request from said advertising provider.

programming code for receiving a match request from a remote device, the request including at least one criteria; programming code for generating a result list in response to the match request, the result list including listings from the accounts on the database, wherein the criteria for each listing in the result list generates a match with the match request, the listings in the result list arranged in an order determined using at least in part the bid amounts of the listings.

**96**. The computer executable instructions stored on a tangible medium of claim **95**, further comprising programming code for storing the match request criteria data.

97. The computer executable instructions stored on a tangible medium of claim 96, further comprising programming code for subsequently generating at least one additional result list based on at least some of the stored criteria data.

98. The computer executable instructions stored on a tangible medium of claim 97, further comprising programming code for selecting a frequency of generation of said additional result list.

99. The method of claim 1, wherein said values is only one of two or more factors utilized to determine the order of at least one of said PSB listings; other factors including but not limited to listing click-through rate, listing conversion rate, listing relevancy factor or factors.

100. The methods of claims 1, 12, 14, 21, 34, 59, or 92, wherein said criteria consists of at least five of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in

business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

101. The methods of claims 1, 12, 14, 21, 34, 59, or 92, wherein said criteria comprises at least five criteria.

102. The method of claim 4, wherein said search result listings are presented anywhere in relation to said PSB result list; including one or more of before, after, amongst; above, below and/or to either side of said PSB result list.

103. The methods of claims 1, 12, 14, 21, 34, 59, or 92, 10 wherein said steps are performed in any order.

104. A computer program product stored on a computerreadable medium including executable instructions that when executed by at least one processor performs functions comprising: maintaining a database having at least one account record for at least one provider using at least one network, said account record including: at least one listing, where each listing includes a criteria field having at least one criteria factor, a modifiable bid amount that is independent of the 20 other components of the listing, a Uniform Resource Locator (URL) corresponding to the address of a document residing on a network server, a description, and a title; an account balance; payment processing information for the provider, said payment processing information maintained isolated 25 from public access via at least one network; payment histories of the provider; and listing histories of the provider; providing the provider with login access in response to authentication, wherein the provider's login access permits the provider access to modify the provider's account record, the provider 30 not being provided with access to modify account records of others; modifying the listing of a provider upon receiving a request from said provider; receiving a match request, the match request including at least one criteria factor obtained from at least one criteria source, the match request being 35 received via at least one network from a seeker at/with a remote device and generating a result list in response to the match request, the result list including listings of the account records on at least one network, wherein the criteria for each listing in the result list generates a match with the match 40 request, the listings in the result list arranged in an order determined using at least in part the bid amounts of the listings

105. The computer program product of claim 104, wherein said criteria consists of at least one of the following: age, 45 gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in 50 business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

106. A tangible computer readable medium including a computer program, executable by a machine, for providing 55 match results based on criteria, the computer program comprising executable instructions for: maintaining a database including a plurality of product, service, benefit listings; wherein each product, service, benefit listing is associated with a bid and criteria; receiving a match request from said 60 seeker; identifying the product, service, benefit listings having criteria generating a match with said match request; ordering the identified product, service, benefit listings into a result list in accordance at least in part with the values of the respective bid amounts for the identified product, service, benefit listings; receiving a retrieval request from said seeker to retrieve information associated with a product, service, benefit

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efit listing in the result list; and recording a retrieval request event in database corresponding to said seeker's retrieval request.

107. A match engine comprising: at least one tangible match repository configured to perform matches; and a match component configured to: receive via an apparatus a match request including at least the demographics and/or psychographics and/or firmographics of a seeker, generate a plurality of matches, each of the plurality of matches being associated with at least one of a plurality of advertisers, receive at least one of at least in part monetarily determined match results from the at least one match repository for the match request, and transmitting said match results to at least one apparatus.

108. The match engine of claim 107, wherein the match component is further configured to: conduct the match process either before, during, or after a seeker search request.

109. The match engine of claim 107, wherein said demographics and/or psychographics and/or firmographics consists of one or more of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

110. The match engine of claim 107, wherein at least one seeker demographic and/or psychographic and/or firmographic is entered into at least one query field.

111. The match engine of claim 110, wherein said query field is able to accept demographics and/or psychographics and/or firmographics as well as search terms/keywords.

112. A web page or web site comprising a plurality of data fields for entering and/or selecting a plurality of biddable search term keywords and a plurality of indicator mechanisms for indicating which of a plurality of demographics and/or psychographics and/or firmographics to utilize in increasing and/or decreasing the amount to be paid for said keyword or keywords.

113. A method of presenting an advertisement, the method comprising: associating one or more multigraphic and/or firmographic attributes with an advertisement; receiving input from a user, wherein the received input comprises one or more multigraphic and/or firmographic attributes; identifying at least a partial match between the multigraphic and/or firmographic attribute or attributes associated with the advertisement and the received input; and presenting the advertisement to the user; wherein the determination of the presentation order and/or size of and/or dimensions of and/or location of the advertisement is based at least in part on a bid on at least one of the said multigraphic and/or firmographic attributes.

114. The method of claim 113, wherein the received input includes a search request.

115. The method of claim 114, wherein presenting further comprises including the advertisement in search results generated in response to the search request.

116. The method of claim 113, further comprising increasing or decreasing the bid by some percentage of the bid.

117. The method of claim 113, further comprising increasing or decreasing the bid by a monetary amount.

118. The method of claim 113, further comprising associating at least one negative/contradictory multigraphic and/or firmographic attribute with the advertisement.

119. The method of claim 118, further comprising: identifying a match between the one or more negative/contradicting multigraphic and/or firmographic attributes and the received input; and determining not to present the advertisement to the

user based on the identified match between the negative/ contradicting multigraphic and/or firmographic attributes or attributes

- 120. The method of claim 113, wherein the received input includes a search refinement.
- 121. The method of claim 120, further comprising receiving a bid for presenting the advertisement in response to the search refinement, wherein the bid increases or decreases the amount of a related bid.
- 122. The method of claim 121, further comprising increasing or decreasing the bid and/or related bid by some percentage of the bid and/or related bid.
- 123. The method of claim 121, further comprising increasing or decreasing the bid and/or related bid by a monetary amount.
- 124. The method of claim 113, wherein at least one of said attributes is selected from at least one set of predetermined attributes.
- 125. The method of claim 113, wherein said attributes consist of at least one attribute from the group of: age, gender, 20 income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.
- 126. A system for presenting an advertisement, the system comprising processor electronics configured to perform 30 operations comprising: associating one or more multigraphic and/or firmographic attributes with an advertisement for which at least one bid has been received; receiving input from a user via a device, wherein the received input comprises one or more multigraphic and/or firmographic attributes; identifying a match between the multigraphic and/or firmographic attribute or attributes associated with the advertisement and the received input; and presenting the advertisement to the user.
- 127. The system of claim 126, wherein the processor electronics are further configured to present the advertisement to the user in conjunction with search results and/or additional content.
- 128. The system of claim 126, wherein the processor electronics are further configured to determine a presentation 45 order and/or size and/or location of the advertisement based at least in part on at least one factor comprising the bid, a click-through rate of the advertisement, and an estimated or actual conversion rate of the advertisement.
- 129. The system of claim 126, wherein the processor electronics are further configured to: associate one or more negative/contradictory multigraphic and/or firmographic attributes with the advertisement; identify a match between the one or more negative/contradictory multigraphic and/or firmographic attributes and the received input; and determine 55 not to present the advertisement to the user based on the identified match between the negative/contradictory multigraphic and/or firmographic attribute or attributes.
- 130. The system of claim 126, wherein the processor electronics are further configured to receive input from the user 60 through a graphical user interface.
- 131. The system of claim 126, wherein said attributes consist of at least one attribute from the group of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or 65 medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of

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locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

- 132. The system of claim 126, wherein the processor electronics are further configured to increase or decrease the bid by some percentage of the bid.
- 133. The system of claim 126, wherein the processor electronics are further configured to increase or decrease the bid by a monetary amount.
- 134. The system of claim 126, wherein the processor electronics are further configured to associate one or more multigraphic and/or firmographic attributes by selecting said attributes from a set comprising a plurality of predetermined multigraphic and/or firmographic attributes.
- 135. An article of manufacture comprising machine-readable instructions for presenting an advertisement, the machine-readable instructions being operable to perform operations comprising: associating one or more multigraphic and/or firmographic attributes with an advertisement for which at least one bid has been received; receiving input from a user, wherein the received input comprises one or more multigraphic and/or firmographic attributes; identifying a match between the multigraphic and/or firmographic attribute or attributes associated with the advertisement and the received input; and presenting the advertisement to the user.
- 136. The article of manufacture comprising machine-readable instructions of claim 135, wherein the received input comprises a search request.
- 137. The article of manufacture comprising machine-readable instructions of claim 136, wherein the machine-readable instructions for presenting are further operable to perform operations comprising including the advertisement in search results generated in response to the search request.
- 138. The article of manufacture comprising machine-readable instructions of claim 135, wherein the machine-readable instructions are further operable to perform operations comprising associating at least one negative/contradicting multigraphic and/or firmographic attribute with the advertisement.
- 139. The article of manufacture comprising machine-readable instructions of claim 138, wherein the machine-readable instructions are further operable to perform operations comprising: identifying a match between the one or more negative/contradicting multigraphic and/or firmographic attributes and the received input; and determining not to present the advertisement to the user based on the identified match between the negative/contradicting multigraphic and/or firmographic attribute or attributes.
- 140. The article of manufacture comprising machine-readable instructions of claim 135, wherein the received input comprises a search refinement.
- 141. The article of manufacture comprising machine-readable instructions of claim 140, wherein the machine-readable instructions for presenting are further operable to perform operations comprising modifying a presentation order corresponding to a previous keyword match based on the search refinement.
- 142. The article of manufacture comprising machine-readable instructions of claim 140, wherein the machine-readable instructions are further operable to perform operations comprising receiving a bid for presenting the advertisement in response to the search refinement, wherein the bid increases or decreases the amount of a related bid.
- 143. The article of manufacture comprising machine-readable instructions of claim 135, wherein said attributes consist of at least one attribute from the group of: age, gender,

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income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

- 144. The article of manufacture comprising machine-readable instructions of claim 137, wherein the machine-readable instructions are further operable to perform operations comprising receiving a bid for presenting the advertisement in response to input from a user that includes the associated one or more multigraphic and/or firmographic attributes.
- 145. The article of manufacture comprising machine-readable instructions of claim 144, wherein the machine-readable instructions are further operable to perform operations comprising increasing or decreasing said bid by some percentage of the bid.
- 146. The article of manufacture comprising machine-readable instructions of claim 144, wherein the machine-readable instructions are further operable to perform operations comprising increasing or decreasing the bid by a monetary amount.
- 147. The article of manufacture comprising machine-readable instructions of claim 144, wherein the machine-readable instructions are further operable to perform operations comprising determining the presentation order and/or size and/or location of the advertisement based at least in part on at least one factor comprising the bid, a click-through rate of the advertisement, and an estimated or actual conversion rate of the advertisement.
- 148. The article of manufacture comprising machine-readable instructions of claim 142, wherein the machine-readable instructions are further operable to perform operations comprising increasing or decreasing the bid and/or related bid by some percentage of the bid and/or related bid.
- 149. The article of manufacture comprising machine-readable instructions of claim 142, wherein the machine-readable instructions are further operable to perform operations comprising increasing or decreasing the bid and/or related bid by a monetary amount.
- 150. The article of manufacture comprising machine-readable instructions of claim 135, wherein the machine-readable instructions are further operable to perform operations comprising associating one or more multigraphic and/or firmographic attributes by selecting said attributes from a set comprising a plurality of predetermined multigraphic and/or firmographic attributes.
- 151. A method of presenting an advertisement, the method 50 comprising: receiving input from a user via a physical device, wherein the received input comprises one or more psychographic and/or firmographic attributes; identifying one or more relevant advertisements based on a match between the received input and one or more psychographic and/or firmographic attributes having predetermined associations with a plurality of advertisements; and delivering at least one relevant advertisement to a physical device.
- 152. The method of claim 151, further comprising wherein said input from a user also includes one or more search 60 terms/keywords.
- 153. The method of claim 152, wherein; in response to the received input; presenting further comprises presenting search results either prior to, concurrently with, or subsequent to presenting one or more advertisements having a matched 65 association with both user and at least one of said advertisements.

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- 154. The method of claim 151, further comprising: determining a presentation order and/or web page and/or web site location of at least one relevant advertisement based at least in part on at least one corresponding bid.
- 155. The method of claim 154, wherein at least one corresponding bid is increased or decreased by some percentage.
- 156. The method of claim 155, wherein some percentage is some percentage of the corresponding bid.
- 157. The method of claim 154, wherein the corresponding bid is increased or decreased by a monetary amount.
- 158. The method of claim 152, further comprising: determining a presentation order and/or web page and/or web site location of at least one relevant advertisement based at least in part on at least one corresponding bid.
- 159. The method of claim 158, wherein at least one corresponding bid is increased or decreased by some percentage.
- 160. The method of claim 159, wherein some percentage is some percentage of the corresponding bid.
- 161. The method of claim 158, wherein the corresponding bid is increased or decreased by a monetary amount.
- 162. The method of claim 154, further comprising: determining a presentation order and/or web page and/or web site location of at least one advertisement based on one or more of the bid, a click-through rate of the advertisement, and a conversion rate of the advertisement.
- 163. The method of claim 158, further comprising: determining a presentation order and/or web page and/or web site location of at least one advertisement based on one or more of the bid, a click-through rate of the advertisement, and a conversion rate of the advertisement.
- 164. The method of claim 151, wherein said psychographic and/or firmographic attributes are drawn from a set compromising a plurality of predetermined psychographic and/or firmographic attributes.
- 165. The method of claim 152, wherein said psychographic and/or firmographic attributes are drawn from a set compromising a plurality of predetermined psychographic and/or firmographic attributes.
- 166. The method of claim 151, further comprising: receiving at least one search term/keyword prior to receiving input from the user; and presenting search results and corresponding psychographic and/or firmographic attributes in response to the received at least one search term/keyword.
- 167. The method of claim 166, wherein the corresponding multigraphic and/or firmographic attributes are associated with a predetermined context.
- 168. A method of enabling an advertiser to select a monetary amount to pay for an advertisement, the method comprising: enable the selecting of one or more search term keywords for an advertisement, receive an indication of an initial monetary bid amount advertiser is willing to pay for or decreasing of said initial bid by an additional monetary amount through enabling the advertisers ability to select one or more multigraphic and/or firmographic attributes applicable and/or not applicable to advertisers targets.
- 169. The method of claim 168, wherein said advertisement is a pay per click advertisement and/or a pay per impression advertisement.
- 170. The method of claim 168, wherein said additional monetary amount is a percentage of advertisers initial bid amount.
- 171. The method of claim 170, wherein said percentage is drawn from a set comprising a plurality of predetermined percentages.
- 172. The method of claim 170, wherein said percentages are in either five or ten percent increments.

173. The method of claim 168, wherein at least one of said attributes is obtained from at least one third party and/or from at least one seeker; said third party defined as being any entity other than the advertising method provider or seeker.

174. The method of claim 168, wherein at least one of said 5 attributes is obtained from at least one social network and/or at least one search engine and/or at least one blog.

175. The method of claim 168, wherein at least one of said attributes is obtained via the use of at least part of at least one: profile, questionnaire, subscription form; machine, instrumentality, tool, system, or process utilized to gather said attributes.

176. The method of claim 168, wherein at least one of said attributes is saved.

177. The method of claim 168, wherein at least one of said 15 attributes is obtained from at least one query box.

178. The method of claim 168, further comprising: receive at least one of said attributes as a result of the use of at least one drop down box.

179. The method of claim 168, wherein said attributes 20 consist of at least one attribute from the group of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

180. The method of claim 168, wherein one or more of said 30 multigraphic and/or firmographic attributes are obtained from one or more from the group comprising. MySpace, Facebook, Microsofts Hotmail, YouTube, Yahoo Mail, Friendster, Windows Live, Linkedln, PlentyOfFish, America Online (AOL) registered user/members, eBay, Amazon, 35 Skype, Twitter, Orkut, Classmates.com, Hi5, Flixster, Bebo, Geni, Tagged, Skyrock, Sonico, Reunion.com, Xiaonei, V Kontakte, any entity utilizing profiles, any entity utilizing subscriptions, any entity which gathers multigraphic and/or firmographic attribute data.

181. A method of enabling an advertiser to prevent an advertisement from being presented to one or more particular multigraphic and/or firmographic groups, the method compromising: enable the selecting of one or more search term keywords for an advertisement, receive an indication of a bid amount advertiser is willing to pay for said one or more keywords, enable the selecting of one or more unwanted multigraphic and/or firmographic attributes applicable to one or more of said groups; correlating advertisers unwanted attributes with one or more groups having said unwanted 50 attributes; thereafter not presenting said advertisement to said group or groups.

182. A system for enabling an advertiser to select a monetary amount to pay for an advertisement, the system comprising processor electronics configured to perform operations comprising: enable the selecting of one or more search term keywords for an advertisement, receive an indication of an initial monetary bid amount advertiser is willing to pay for said keywords; thereafter enable the increasing or decreasing of said initial bid by an additional monetary amount through enabling the advertisers ability to select one or more multigraphic and/or firmographic attributes applicable and/or not applicable to advertisers targeted seekers.

183. The system of claim 182, wherein the processor electronics are further configured to provide for said advertisement to be a pay per click advertisement and/or a pay per impression advertisement.

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184. The system of claim 182, wherein the processor electronics are further configured to provide for said additional amount to be a percentage of advertisers initial monetary bid amount.

185. The system of claim 184, wherein the processor electronics are further configured to draw said percentage from a set comprising a plurality of predetermined percentages.

**186.** The system of claim **184**, wherein the processor electronics are further configured for said percentages to be in either five or ten percent increments.

187. The system of claim 182, wherein the processor electronics are further configured to obtain at least one of said attributes from at least one third party and/or from at least one seeker; said third party defined as being any entity other than the advertising system provider or seeker.

188. The system of claim 182, wherein the processor electronics are further configured to obtain at least one of said attributes from at least one social network and/or one search engine and/or one blog.

189. The system of claim 182, wherein the processor electronics are further configured to obtain at least one of said attributes via the use of at least part of at least one: profile, questionnaire, subscription form; machine, instrumentality, tool, system, or process able to provide said attributes.

190. The system of claim 182, wherein the processor electronics are further configured to save at least one of said attributes.

191. The system of claim 182, wherein the processor electronics are further configured to obtain at least one of said attributes from at least one query box.

192. The system of claim 182, wherein the processor electronics are further configured to receive at least one of said attributes from at least one drop down box.

193. A system for enabling an advertiser to prevent an advertisement from being presented to one or more particular multigraphic and/or firmographic groups, the system comprising processor electronics configured to perform operations comprising: enable the selecting of one or more search term keywords for an advertisement, receive an indication of a monetary bid amount advertiser is willing to pay for said keywords, enable the selecting of one or more unwanted multigraphic and/or firmographic attributes applicable to one or more of said groups; correlating advertisers unwanted attributes with one or more groups having said unwanted attributes; thereafter not presenting said advertisement to said group or groups.

194. The system of claim 182, wherein the processor electronics are further configured to obtain one or more of said multigraphic and/or firmographic attributes from one or more from the group comprising. MySpace, Facebook, Hotmail, YouTube, Yahoo Mail, Friendster, Windows Live, LinkedIn, PlentyOfFish, America Online (AOL) registered user/members, eBay, Amazon, Skype, Twitter, Orkut, Classmates.com, Hi5, Flixster, Bebo, Geni, Tagged, Skyrock, Sonico, Reunion.com, Xiaonei, V Kontakte, any entity utilizing profiles, any entity utilizing subscriptions, any entity which gathers multigraphic and/or firmographic attribute data.

195. The systems of claim 182 or 193, wherein said attributes consist of at least one attribute from the group of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

196. An article of manufacture comprising machine-readable instructions for enabling an advertiser to select a monetary amount to pay for an advertisement, the machine-readable instructions being operable to perform operations comprising: enabling the selecting of one or more search term seywords for an advertisement, receiving an indication of an initial monetary bid amount advertiser is willing to pay for said keywords; thereafter enabling the increasing or decreasing of said initial bid by an additional monetary amount through enabling the advertisers ability to select one or more multigraphic and/or firmographic attributes applicable and/or not applicable to advertisers targets.

197. The article of manufacture comprising machine-readable instructions of claim 196, wherein said advertisement is a pay per click advertisement and/or a pay per impression 15 advertisement.

198. The article of manufacture comprising machine-readable instructions of claim 196, wherein said additional monetary amount is a percentage of advertisers initial bid amount.

199. The article of manufacture comprising machine-readable instructions of claim 198, wherein said percentage is drawn from a set comprising a plurality of predetermined percentages.

200. The article of manufacture comprising machine-readable instructions of claim 198, wherein said percentages are 25 in five or ten percent increments.

201. The article of manufacture comprising machine-readable instructions of claim 196, wherein at least one of said attributes is obtained from at least one third party and/or from at least one seeker, said third party defined as being any entity other than the advertising system/method provider or seeker.

202. The article of manufacture comprising machine-readable instructions of claim 196, wherein at least one of said attributes is obtained from at least one social network and/or one search engine and/or one blog.

203. The article of manufacture comprising machine-readable instructions of claim 196, wherein at least one of said attributes is obtained via the use of at least part of at least one: profile, questionnaire, subscription form; machine, instrumentality, tool, system, or process utilized to obtain said 40 attributes.

204. The article of manufacture comprising machine-readable instructions of claim 196, wherein at least one of said attributes is saved.

205. The article of manufacture comprising machine-readable instructions of claim 196, wherein at least one of said attributes is obtained from at least one, query box.

206. The article of manufacture comprising machine-readable instructions of claim 196, wherein the machine-readable instructions are further operable to perform operations comprising receiving at least one of said attributes as a result of the use of at least one drop down box.

207. The article of manufacture comprising machine-readable instructions of claim 196, wherein said attributes consist of at least one attribute from the group of: age, gender, 55 income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

208. The article of manufacture comprising machine-readable instructions of claim 196, wherein one or more of said 65 multigraphic and/or firmographic attributes are obtained from one or more from the group comprising: MySpace, 58

Facebook, Hotmail, YouTube, Yahoo Mail, Friendster, Windows Live, LinkedIn, PlentyOfFish, America Online (AOL) registered user/members, eBay, Amazon, Skype, Twitter, Orkut, Classmates.com, Hi5, Flixster, Bebo, Geni, Tagged, Skyrock, Sonico, Reunion.com, Xiaonei, V Kontakte, any entity utilizing profiles, any entity utilizing subscriptions, any entity which gathers multigraphic and/or firmographic attribute data.

209. An article of manufacture comprising machine-readable instructions for enabling an advertiser to prevent an advertisement from being presented to one or more particular multigraphic and/or firmographic groups, the machine-readable instructions being operable to perform operations comprising: enabling the selecting of one or more search term keywords for an advertisement, receiving an indication of a bid amount advertiser is willing to pay for said one or more keywords, enabling the selecting of one or more unwanted multigraphic and/or firmographic attributes applicable to one or more of said groups; correlating advertisers unwanted attributes with one or more groups having said unwanted attributes; thereafter not presenting said advertisement to said groups.

210. A system comprising the auctioning of and/or bidding on of entity demographics and/or psychographics and/or firmographics.

211. The system of claim 210; wherein said demographics and/or psychographics and/or firmographics consists of one or more of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

212. The system of claim 210, wherein at least one of said demographics and/or psychographics and/or firmographics is selected by using; or is received from; at least one drop-down here.

213. The system of claim 212, further comprising five or more drop-down boxes.

214. The system of claim 210, wherein at least one of said demographics and/or psychographics and/or firmographics is expressed as a numeric range.

215. A method comprising the auctioning of and/or bidding on of entity demographics and/or psychographics and/or firmographics; wherein said auctioning and/or bidding is conducted at least in part utilizing at least one computing device.

216. The method of claim 215, wherein said demographics and/or psychographics and/or firmographics consists of one or more of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

217. The method of claim 215, wherein at least one of said demographics and/or psychographics and/or firmographics is selected by using; or is received from; at least one drop-down box.

218. The method of claim 217, further comprising five or more drop-down boxes.

219. The method of claim 215, wherein at least one of said demographics and/or psychographics and/or firmographics is expressed as a numeric range.

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220. A computer program product stored on a computerreadable medium including executable instructions that when executed by at least one processor performs functions comprising: auctioning and/or bidding on entity demographics and/or psychographics and/or firmographics.

221. The computer program product of claim 220, wherein said demographics and/or psychographics and/or firmographics consists of one or more of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

222. The computer program product of claim 220, wherein at least one of said demographics and/or psychographics and/or firmographics is selected by using; or is received from; at least one drop-down box.

223. The computer program product of claim 222, further comprising five or more drop-down boxes.

224. The computer program product of claim 220, wherein at least one of said demographics and/or psychographics and/or firmographics is expressed as a numeric range.

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225. An article of manufacture comprising machine-readable instructions, the machine-readable instructions being operable to perform operations comprising: the auctioning of and/or bidding on of entity demographics and/or psychographics and/or firmographics.

226. The article of manufacture of claim 225, wherein said demographics and/or psychographics and/or firmographics consists of one or more of the following: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.

227. The article of manufacture of claim 225, wherein at least one of said demographics and/or psychographics and/or firmographics is selected by using; or is received from; at least one drop-down box.

228. The article of manufacture of claim 227, further comprising five or more drop-down boxes.

229. The article of manufacture of claim 225, wherein at least one of said demographics and/or psychographics and/or firmographics is expressed as a numeric range.

\* \* \* \* \*



US008341020B2

## (12) United States Patent Morsa

(10) Patent No.: U

US 8,341,020 B2

(45) Date of Patent:

\*Dec. 25, 2012

#### (54) MATCH ENGINE MARKETING

(76) Inventor: Steve Morsa, Thousand Oaks, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 271 days.

This patent is subject to a terminal dis-

claimer.

(21) Appl. No.: 12/925,615

(22) Filed: Oct. 25, 2010

#### (65) Prior Publication Data

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- (63) Continuation of application No. 11/250,908, filed on Oct. 13, 2005, now Pat. No. 7,904,337.
- (60) Provisional application No. 60/619,987, filed on Oct. 19, 2004.
- (51) Int. Cl. G06Q 30/00 (2006.01) G06Q 10/00 (2012.01)

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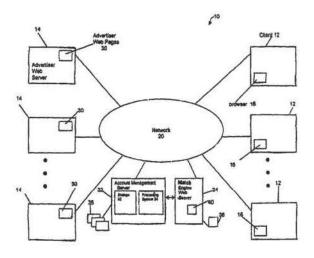
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Primary Examiner - Jonathan Ouellete

#### (57) ABSTRACT

Enabling advertisers using a computer network such as the Internet and a match engine to submit their offerings to product, service, benefit seeking entities. In some embodiments, a database having accounts for the providers is made available. Accounts contain contact and billing information for an advertiser; and at least one offering having at least a description, a criteria set comprising one or more criterion factors, and a bid amount. An advertiser influences a position of an offering in the advertiser's account by first selecting offering relevant criteria. The advertiser enters the criteria and the description into a listing; influencing at least in part the position for the listing within a results page through an online bidding process. This results page is generated in response to a seeking entity query of the match engine. Pay for performance demographic, geographic, psychographic criteria/ characteristics targeted directly advertising (frictionless advertising) is enabled.

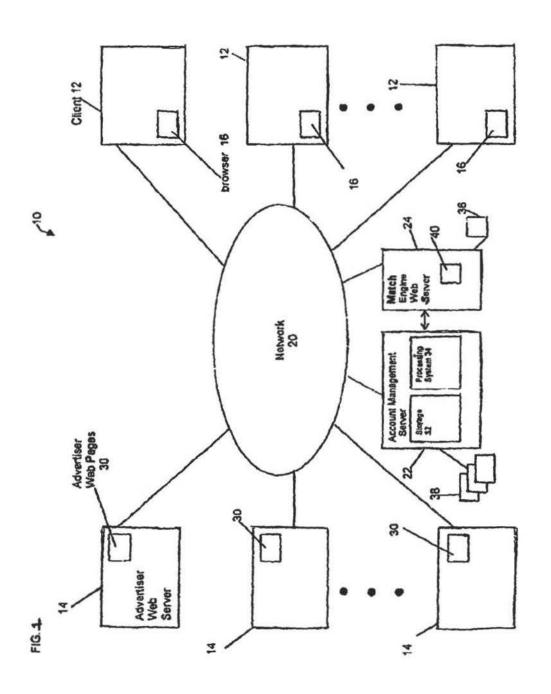
#### 162 Claims, 10 Drawing Sheets



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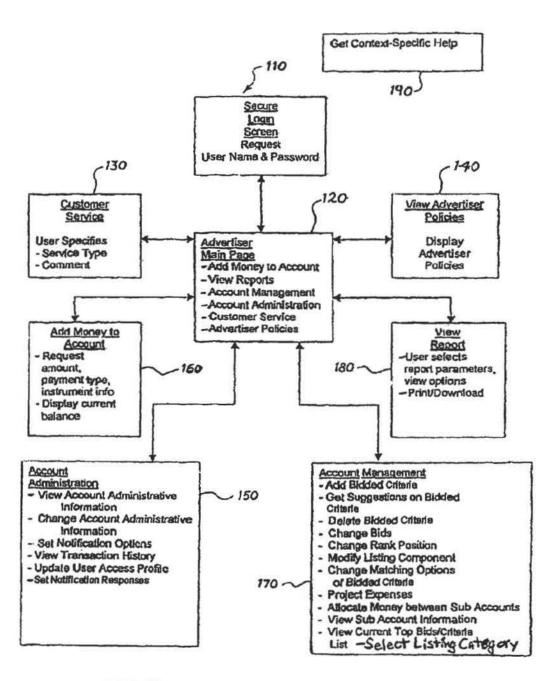
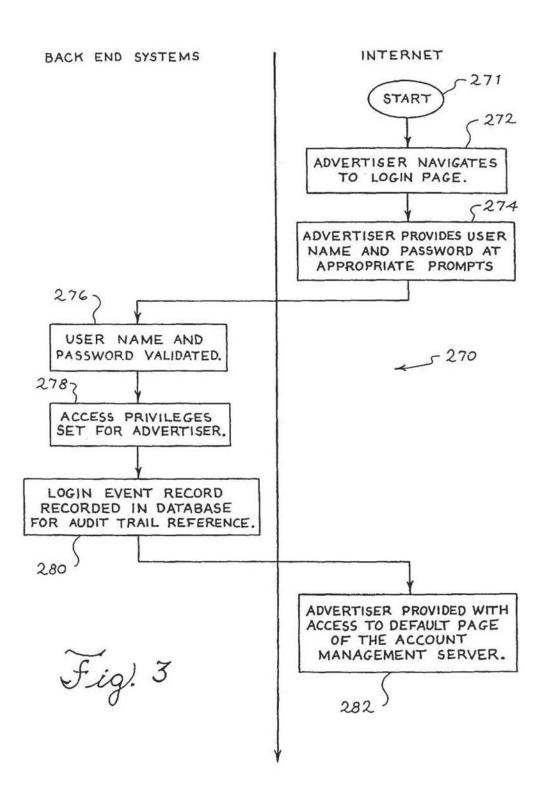
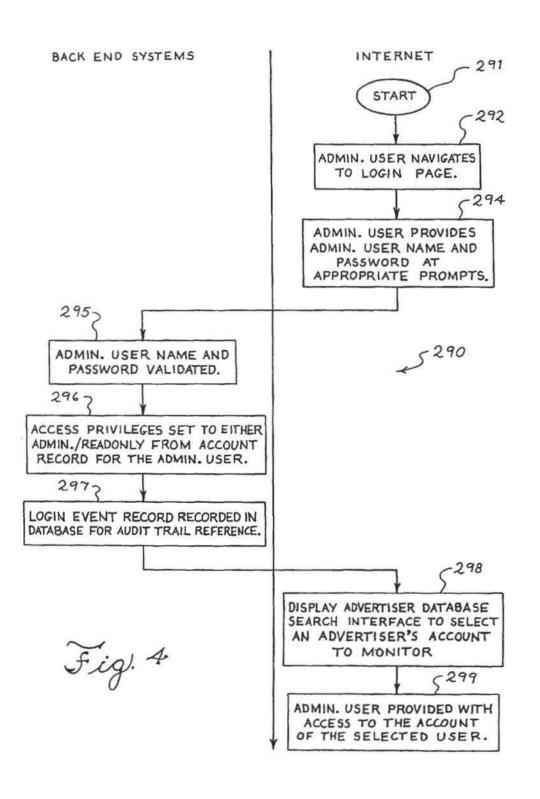


FIG. 2

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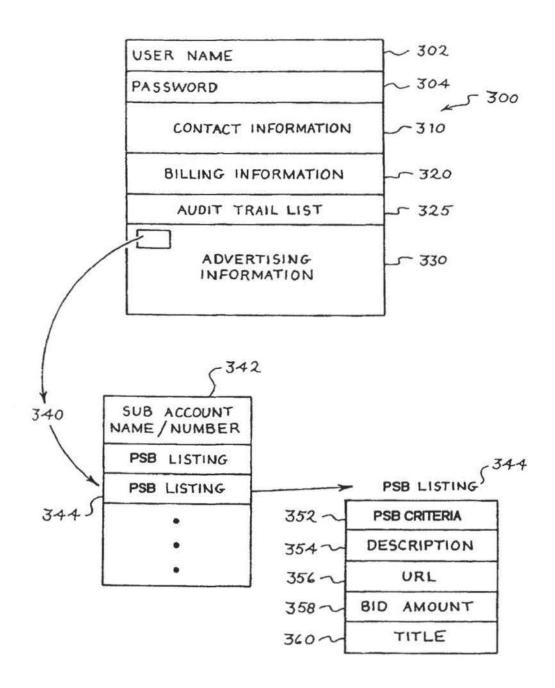
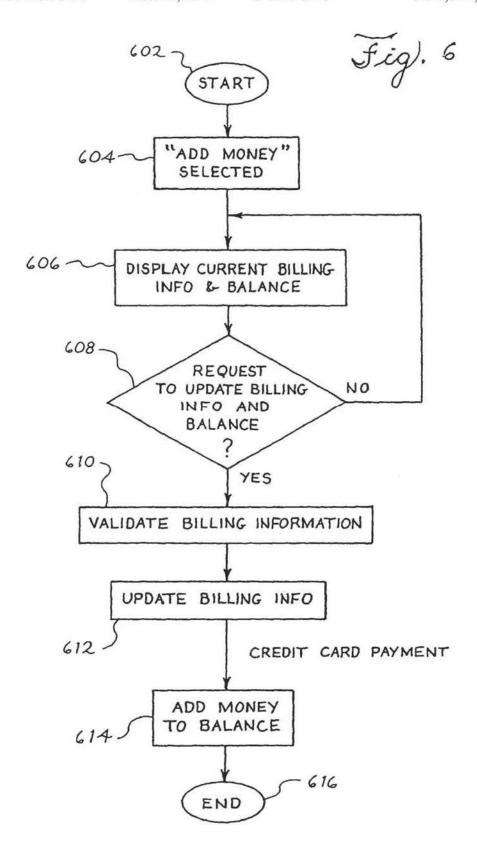


FIG.5

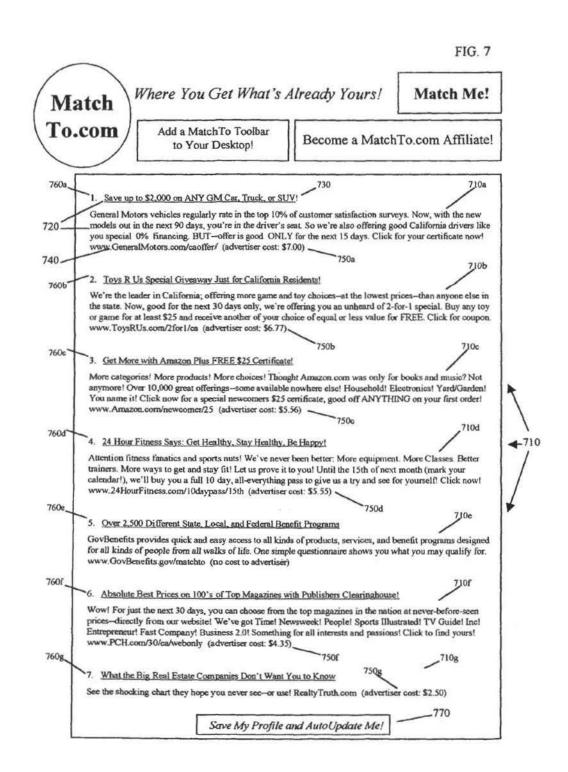
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U.S. Patent D

ACCOUNT SELECTED

NO

- 850

CALCULATE CURRENT BIDS, RANK, BID TO BECOME #1

REQUEST

TO UPDATE

840-

DISPLAY CHANGES

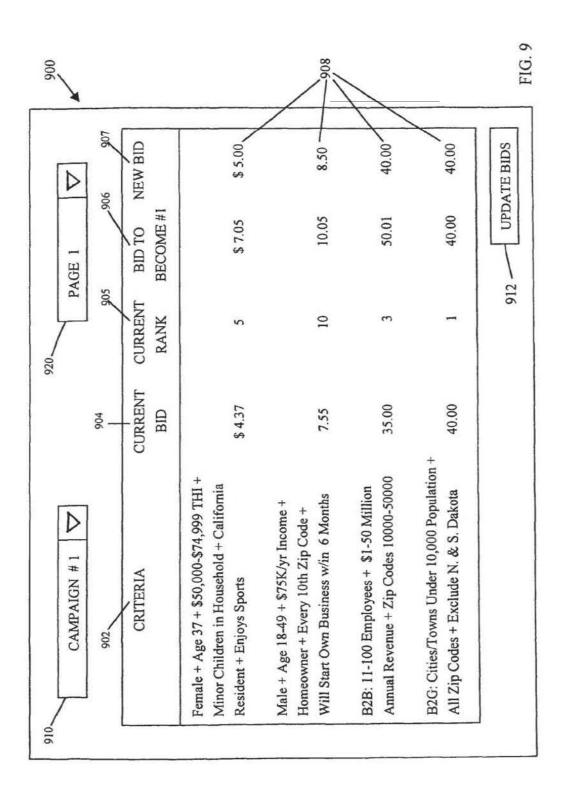
END

Fig. 8

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Government F	mplete this short, confidential questionnaire for a Free List of up to 100's of Commerci- roducts, Services, and Benefits specially designed and available just for you and folks like probably never even heard of and can only find out about here. Prepare to be nicely surprised	e you
Date of Birth:	Marital Status: SingleMarriedDivorcedSeparated Sex: MI	-
Do You: Own	Home Rent/Lease In what city/town do you live: State: (2-lett	ter)
Zip Code:	Children Living at Home (Y/N): If yes, please list ages of each:	_
Your annual in \$75,000-\$9	come is: Under \$20,000 \$20,001-\$29,999 \$30,000-\$49,999 \$50,000-\$74,99 99,999 \$100,000-\$149,999 \$150,000-\$199,999 \$200,000 & over	19
How many peo	ple, including yourself, are in your household? How many years at current address?	-
Are you (check Working from	all that apply):Homemaker?Retired?Student?Self Employed/Business Own a home office?In the Military?A Federal, State, County, or City/Town employee?	er?
	eck all that apply):Professional/TechnicalTradesman/Machine Operator/Laborer agement/ExecutiveMiddle ManagementSales/MarketingClerical/Service Worker	
Education leve	(Y/N): Completed College Completed High School Completed Grad School	loc
Do you own st	ocks, bonds, mutual funds, or investment real estate?(Y/N) If no, would you like to?	
What are the to	vo newest cars in your household? Car #1: Make Model Car #2: Make Model Year	
Are they (Y/N)	Car #2: Make Model Year : Car #1: Leased Financed Car #2: Leased Financed	_
Credit cards us	ed regularly (Y/N):AM/EX/DinersMaster Card/Visa/DiscoverDept Store/Gas/et	C
Have a bal Buy/Lease	llowing do you plan to do within the next 6 months (check all that apply): Get Married?  y? Buy a house/condo/co-op? Remodel a home? Buy/Lease a new vehicle?  a used vehicle? Buy a personal computer? Move to a new city, town, state, country  se? Travel to another country? Buy a timeshare? Buy a vacation home?	
Snoring	nditions/problems you or someone in your household have? (check all that apply): Asthn Allergies Arthritis Heart/Circulation High Blood Pressure Headaches not listed above: , ,	na
_GolfPhy _Camping/R\ _Sewing/Crai	activities do you/your spouse (if married) enjoy doing on a regular basis? (check all that apply sical Fitness/ExerciseRunning/JoggingSnow SkiingWater SkiingSailing	,
Before you s sccurate you	ubmit your request, remember that the more complete and are when filling out the questionnaire, the more products,	1

Case: 15-1336 Document: 22 Page: 130 Filed: 04/20/2015

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#### I MATCH ENGINE MARKETING

#### CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation application of U.S. application Ser. No. 11/250,908, filed Oct. 13, 2005 now U.S. Pat. No. 7,904,337, which claims the benefit of U.S. provisional patent application No. 60/619,987 filed Oct. 19, 2004. The disclosures of both are hereby incorporated by reference in their entirety for all purposes.

#### STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

SEQUENCE LISTING OR PROGRAM

Not Applicable

REFERENCE TO A MICROFICHE APPENDIX

Not Applicable

#### TRADEMARK REFERENCE

MATCH ENGINE MARKETING and PAID MATCH are trademarks of the inventor. All rights reserved.

#### COPYRIGHT NOTICE

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#### ABSTRACT NOTICE

As it is an abstract only and therefore in no way exhaustive of the present inventions numerous possible forms and embodiments, it is to be understood that the present inventions Abstract is not intended to, and should accordingly not be used to, either limit the scope of the claims or to limit the invention to any particular embodiment(s) or to (a) precise form(s).

#### TECHNICAL FIELD

This invention relates generally to the field of advertising, and in particular to the field of matching advertisers with entities via computer networks.

### BACKGROUND OF THE INVENTION

The transfer of information over computer networks has become an increasingly important means by which institutions, corporations, and individuals do business. Computer networks have grown over the years from independent and isolated entities established to serve the needs of a single group into vast internets which interconnect disparate physical networks and allow them to function as a coordinated 65 system. Currently, the largest computer network in existence is the Internet. The Internet is a worldwide interconnection of

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computer networks that communicate using a common protocol. Millions of computers, from low end personal computers to high end super computers, are connected to the Internet.

The Internet has emerged as a large community of electronically connected users located around the world who readily and regularly exchange significant amounts of information. The Internet continues to serve its original purposes of providing for access to and exchange of information among government agencies, laboratories, and universities for research and education. In addition, the Internet has evolved to serve a variety of interests and forums that extend beyond its original goals. In particular, the Internet is rapidly transforming into a global electronic marketplace of goods and services as well as of ideas and information.

Current paradigms for generating web site traffic, such as banner advertising, follow traditional advertising paradigms and fail to utilize the unique attributes of the Internet. In the banner advertising model, web site promoters seeking to promote and increase their web exposure often purchase space on 20 the pages of popular commercial web sites. The web site promoters usually fill this space with a colorful graphic, known as a banner, advertising their own web site. The banner may act a hyperlink a visitor may click on to access the site. Like traditional advertising, banner advertising on the Inter-25 net is typically priced on an impression basis with advertisers paying for exposures to potential consumers. Banners may be displayed at every page access, or, on search engines, may be targeted to search terms. Nonetheless, impression-based advertising inefficiently exploits the Internet's direct marketing potential, as the click-through rate, the rate of consumer visits a banner generates to the destination site, may be quite low. Web site promoters are therefore paying for exposure to many consumers who are not interested in the product or service being promoted, as most visitors to a web site seek specific information and may not be interested in the information announced in the banner. Likewise, the banner often fails to reach interested individuals, since the banner is not generally searchable by search engines and the interested persons may not know where on the web to view the banner.

Pay for placement database search systems have been developed in which advertisers bid on the placement of their listings in search results returned to a searcher in response to a world wide web query from a searcher. Each advertiser's listing includes a search term and a bid amount. In some 45 embodiments, each advertiser's listing includes a title, descriptive text and a clickable hyperlink or uniform resource locator (URL). The database of search listings stores many such listings, each associated with an advertiser. Upon receipt of the query, the database is searched and listings having a search term matching the query are formatted for display to the searcher as search results.

The advertisers adjust their bids or bid amounts to control the position at which their search listings are presented in the search results. The pay for placement system places search listings having higher-valued bids higher or closer to the top of the search listings. Other rules may be applied as well when positioning search listings.

For example, a more senior listing may be positioned or ranked higher than a junior listing for the same search term and same bid. Higher-ranked listings are seen by more searchers and are more likely to be clicked, producing traffic of potential customers to an advertiser's web site.

The searcher is presented with search listings based at least in part on the bid amounts. The search listings may extend over several screens or pages when formatted for viewing. As a result, higher positioned search listings are much more likely to be seen by the searcher. Moreover, some pay for

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placement systems have affiliate agreements whereby some of their highest-bidded search listings are presented to searchers using other general purpose search engines. Because of these affiliate agreements and similar arrangements, an advertiser's web site, if bid highly enough, may today be seen by as many as seventy-five percent of Internet users.

An advertiser wishing to attract searchers to his web site as potential customers for the advertiser's goods and services thus has an incentive to position his search listing relatively high in the search results. An advertiser may enter bids on many search terms. For search terms which are closely related to the content of the advertiser's web site, the advertiser might place relatively large bids. For less closely related search terms, the advertiser might place smaller bids. A number of strategies have been developed by advertisers to increase 15 traffic to advertiser web sites in this manner.

Similarly, pay for placement search systems have developed tools to help the advertisers manage their bids and attract traffic. Overture Services, Inc., (now a division of Yahoo) operating a system at www.overture.com; and Google, at 20 www.google.com, have presented advertisers with a standard bidding page accessible over the world wide web. The standard bidding page allows an advertiser to log in, display and edit all current search listings and review bids. Today, a number of other competitors including FindWhat also offer such 25 pay for placement systems.

Despite their current popularity, however, such conventional pay for placement systems actually have a surprising number of major drawbacks. First, as a result of these systems quickly expanding recognition and use since their develop- 30 ment in the late 1990's, combined with their having an effective limit on the number of economically viable search terms upon which advertisers are willing to bid on such systems growth rate is now predicted to decline precipitously in the years to come. Due to the popularity of and resultant often 35 rabid bidding for the most effective and responsive search terms, many companies-especially smaller ones-are starting to drop out of such systems due to this growing lack of affordability. In fact, some experts now believe that in the years to come, as has been the case with broadcast television, 40 only larger companies, often bidding on 100's or even 1,000's of search terms each, will be able to even afford to participate in such systems at all.

Second, as is well known in this "search engine marketing"
[SEM] industry, despite these systems best efforts, attempting to match advertisements to search terms is inherently problematic when working within an unstructured environment like the Internet. Because search engines use at least in part impersonal algorithms, link analysis, and other automated methodologies to locate and present search—and so advertising—results, the delivery of irrelevant or minimal relevancy advertisements to the searcher is all too common. Indeed, attempting to discern searchers intent from the search terms they use is often characterized as being akin to trying to read their minds.

A third problem with these systems is their inability to identify those many products, services, and benefits the searchers know nothing about yet for which they may—and do—qualify to obtain, use, and benefit from. While knowing ones intent is great (if and when you can discern it), basing (so called) targeted advertising presentations on just that factor shortchanges both entities and the provider/advertisers. With such "targeted by intent only" advertising systems, it's very much a case of "if only you knew how much you don't know."

A fourth problem is the artificial limit such systems, by 65 their structural nature, place on the number of advertisers who can effectively obtain placement—and therefore visibility of

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their advertising—based on each search term. People conduct searches because they are looking for information of some type from any web site or source which might have it; and, they are not normally very patient about getting it. Numerous studies have shown that few people will view more that the first two or three pages of search results before either changing the search terms and trying again; or trying their search at one or more of the many other readily available search engines. This means that—because computer screens and therefore web pages are of limited physical/viewable size, there's only a precious few positions of any marketing value for advertisers to bid on if they expect their ads to even be seen by the searcher (or by worthwhile numbers of searchers), much less clicked on and forwarded to the advertisers web site for a potential purchase to take place.

Relatedly, because people conducting searches usually are doing so to quickly gather what they consider to be unbiased (and preferably advertising-free) information, and not to look at a bunch of ads; if they don't find the information they're actually looking for in the first few pages, as stated, they don't often stick around scrolling through pages and pages of ads stuck along the side of or amongst what to them is irrelevant content. If they don't quickly see what they're looking for in the first few pages, anything that follows is history—including any remaining ads.

A little talked about fifth problem with search engine marketing systems is "click fraud;" where clicks on the various displayed paid listings are executed either manually or via automated systems (some now very sophisticated in their operation) not due to an interest in the product or service advertised, but in order to inflict financial pain on targeted advertisers (often by their competitors, who are unfortunately able to easily identify the search terms their competition is paying for) and/or in order to gain illegal commissions for the entities (or their agents) perpetrating these frauds. Overseas "click fraud rings" have even recently sprung up to take advantage of this vulnerability. Some estimates place such fraud as high as 10-20% or more of all "hits" on the most valuable search terms and/or within the most competitive industry sectors. Such fraud; considered by many in the field to be far more widespread than is readily admitted to by the providers of such systems; may reportedly be costing many advertisers up to \$100's to 10's of \$1,000's of dollars a month

A sixth problem with such systems is their great difficulty in delivering search results—and therefore advertisers—who are geographically local to individual searchers. While at this time SEM has become a five-billion dollar/year industry, various estimates place the total potential SEM market to be perhaps three-to-five times this amount; if only locally-based vendors were able to target their products and services only to those people within reasonable driving distance of their places of business. It doesn't do "Joe's Plumbing" any good to be one of the paying advertisers on a search term such as "plumbing," when only a minuscule percentage of "plumbing" searchers are within Joe's geographic service area, and therefore able to take advantage of his services.

A seventh problem with SEM systems is their inherently complicated, esoteric nature. While sophisticated product and service providers have—though usually with the assistance of experts in the field—readily embraced these systems, precious few of the many millions of smaller companies and professional practices have done so. Already familiar—and comfortable—with such media as yellow pages, newspapers, direct mail; perhaps even radio and TV; they've understandably shown little interest to date in putting complicated SEM (or the related search engine optimization [SEO]) techniques

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and methodologies to work in their businesses—even as much additional profit doing so could mean to them. The whole complicated Internet advertising business leaves them lost and confused. As the current conventional SEM advertising systems continue to become more and more complicated as the years go on, this small-company/business disconnect only continues to grow worse.

These paid search systems eighth problem is centered around trademark infringement and related intellectual property (IP) issues. An important percentage of the words and 10 phrases targeted by advertisers utilizing SEM systems are actually the legal product, service, and business-name trademarks of many 100's to 1,000's of companies around the world who are for the most part understandingly very displeased and "up in arms" over the use of their intellectual property by competitors and others profiting from their wellknown creations. Though recent indications are that this issue may be reaching a conclusion and resolution generally favorable to those providing and utilizing such SEM systems within the US; as recently illustrated by the French court 20 decision against one of the world's largest paid search providers, such favorable outcomes may be few and far between when it comes to other countries; most of which regularly demonstrate a greater propensity for "protecting" their established companies against real or perceived interlopers and 25 "outsiders" than does the US.

Thus, search engine marketing (SEM) and other traditional paradigms of advertising fail both to provide maximized results to 10's of millions of businesses/advertisers, while further failing to deliver the up to 100's of little- or un-known yet valuable and useful, relevant, targeted product, service, and benefit opportunities and information to interested parties in a cost-effective manner. Internet advertising done right can offer a level of targetability, interactivity, measurability, and competitive privacy not generally available from other media. 35 With the proper tools, technologies, and methodologies; Internet advertisers have the ability to quickly, easily, affordably, and confidentially target their messages to specific groups of consumers and receive prompt feedback as to the effectiveness of their advertising campaigns.

Ideally, web site promoters should be able to control their placement in match result listings so that their listings are prominent in match requests that are relevant to the content of their web site and/or their offerings. The match engine functionality of the Internet (i.e. GovBenefits.gov and Ben- 45 efitsCheckUp.org) needs to be focused in a new direction to facilitate an on-line marketplace which offers consumers and other entities quick, easy and relevant match results while providing Internet advertisers and promoters of all sizes and revenues with a cost-effective way to target consumers. A 50 consumer utilizing a match engine that facilitates this on-line marketplace will find companies, businesses, government and non-profit agencies, etc that offer the products, services, benefits and information that the consumer is seeking. In this on-line marketplace, companies selling or offering products, 55 services, benefits, or information bid in an open auction environment for positions on a match result list generated by an Internet match engine.

Since advertisers must pay for each click-through referral generated through the match result lists generated by the 60 match engine, advertisers have an incentive to select and bid on those match criteria (characteristics) which are most relevant to their web site and offerings. The higher an advertiser's position on a match result list, the higher likelihood of a "referral;" that is, the higher the likelihood that a consumer 65 will be referred to the advertiser's web site/offerings through the match result list.

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Therefore; it would be desirable then to provide a system and method which would readily reduce/mitigate/overcome the many substantial drawbacks, deficiencies, and shortcomings of the present conventional advertising paradigms.

#### ADVANTAGES

Accordingly, the present invention may in one or more of its various embodiments have one or more of the following advantages:

The providing of a more level playing field where individuals, companies, businesses, and professional practices of all types, sizes, industries, and revenues may more quickly, easily, and affordably compete more equally among and between themselves for customers and clients.

The providing of a system and method where promoters may have their choice of potentially up to millions of different targeted criteria combinations from which to target their offerings to.

The providing of a system and method where up to 100's or more of advertisers at one time may be more effectively and profitably displayed to, viewed by, and have their web sites visited (and/or be otherwise contacted) by these motivated, highly-interested product, service, benefit, and information seekers.

The creation of a new system of advertising where advertisers target the most interested consumers and entities by participating in a free market which attaches a monetary cost for an advertiser's listing in a match result list generated using advertiser-selected criteria.

The providing to product, service, benefit, and information seeking entities with products, services, benefits, and information individually tailored and specifically targeted to their demographic, geographic, psychographic factors (collectively; multigraphics).

The providing of a system and method where benefit providers may more quickly, easily, and affordably identify potential recipients for whom to present their must-qualifyfor-in-order-to-receive benefits and benefit programs.

The providing of a system and method for enabling promoters to influence a position on a match result list generated by a match engine for a specified set of criteria.

The providing of a system and method for enabling promoters to specify criteria to the match engine so as to target their match result list placement to the match queries most relevant to their business/offer.

The providing of a system and method for enabling promoters to examine their current criteria and placement couplings online and to make substantially instantaneous changes to their selected criteria, placements, and web site titles and descriptions.

The providing to promoters a match engine that permits such promoters to influence a higher or lower placement in a match result list via a continuous, competitive online bidding process.

The providing of a cost-effective method of Internet advertising where the web site promoter is charged in direct proportion to the number of actual visits generated by the match engine.

The allowing of a web site promoter to control a title or description associated with the promoters listing in a match result list generated by the match engine.

The providing of a pay-per-click (PPC) system with reduced click fraud and concurrent increased advertiser competitive privacy by making more difficult both the identification of any particular advertiser(s) as well as their advertisement(s).

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The reduction and/or possible elimination of the real or perceived need and/or desire of many PPC advertisers to bid on other companies trademarked products and services in order to reach their desired prospects.

The enabling of the identification of products, services, and 5 benefits which are available to an entity yet which entity would otherwise have little or no knowledge of.

The enabling of less sophisticated product and service providers to also make use of Internet based pay-for-performance advertising due to the present invention being a more quickly and easily understood and utilized PPC system.

The enabling of local companies/businesses to more easily pay-for-performance PPC advertise to only those prospects located and/or operating within the geographic areas in which these companies/businesses choose to provide their products 15 and services.

The frictionless advertising disintermediation of traditional advertising vehicles including one or more of the following: Newspapers, Magazines, Search engines, Television, Radio, Phone directories, Direct mail, Web sites, Billboards, 20 Insert media (i.e. package inserts, ride alongs, blow-ins), etc.

#### SUMMARY OF THE INVENTION

The present invention provides a way for product/service/
benefit (and information) providers/advertisers/promoters
(hereinafter "advertisers, "providers," or "promoters") using
a computer network to influence the positions within a product/service/benefit (hereinafter "PSB") result list (hereinafter
"PSB result list" or just "result list") generated by a product/
service/benefit (PSB) matching "engine" (hereinafter "match
[ing] engine" or just "engine").

More particularly, the present invention relates to a system and method to enable providers/advertisers to select PSB criteria/characteristics (hereinafter "PSB criteria" or "criteria" or "characteristics") relevant (having nexus) to themselves and/or their product(s)/service(s)/benefit(s) (hereinafter "PSBs" or "offerings"); and influence result list positions for their PSB listings (hereinafter "PSB listings" or just "listings") on a match engine result list.

"Entities" shall herein be understood to mean individuals, companies, businesses, non-profits, charities, governments, educational institutions, and families; including any and all other agencies, groups, organizations, enterprises, etc. (of any manner or form); and also including two or more of any of 45 these entities acting together and in concert with one another.

In a preferred embodiment, after a PSB seeker (hereinafter "PSB seeker," "entity seeker," or simply "seeker") has completed the requisite seeker questionnaire/survey/profile (hereinafter "questionnaire"), the match engine will generate a results list with each respective providers' listing(s) in position(s) influenced at least in part by at least one criterion (criteria) factor as chosen by each provider. It is to be understood that "criteria," as used herein, includes both the singular (criterion) as well as the plural (criteria); as is common in 55 today's language.

In a preferred embodiment of the present invention, a provider selects one or more of its criteria and influences a position within the results list generated by that criteria by participating in an online competitive bidding process. This online competitive bidding process is known as a "pay only for results" process. "Pay only for results" applies market principles to PSB matching on the Internet. Conventional PSB matching engines do not provide a way for providers to easily predict the position of their PSBs in results lists.

A tool enabling providers to target criteria relevant to their business/purpose and to pinpoint the placement of their PSBs 8

within the results provides a powerful advantage to businesses and others seeking to increase the use of their PSBs. Furthermore, a competitive bidding process and pricing based on number of referrals generated helps insure that the pricing structure reflects the market and is accessible to providers of all budget sizes.

To participate in the process, a PSB provider may in a preferred embodiment access the provider's user account through a secure web site. The provider may use the account to place bids on criteria that are relevant to the provider's web site (e.g., it products, services, benefits, information). Each bid is specific to at least one criterion and corresponds to a money amount that the provider will pay to the owner of the matching engine each time a seeker clicks on the provider's hyperlinked listing in the result list generated by the matching engine. The seeker's click will result in an access request being sent to the provider's web site (or, in other embodiments, (an) alternative location(s) of provider's choosing, including one or more product/informational/sales message pages in the event provider doesn't have (a) web site/s or prefers not to use it/them), which will respond by transmitting the provider's web page to the seeker's browser. The charge to the provider for the placement is therefore directly proportional to the benefit received, since the charge is based on the number of referrals to the provider's web site (as stated, and/or other online or offline provider designated location/s) that were generated by the matching engine.

Preferably, the higher the bid, the more advantageous the placement in the result list that is generated when the bidded criteria is entered by a PSB seeker using the engine. The list is arranged in order of decreasing bid amount, with the PSB listing corresponding to the highest bids displayed first to the seeker. Optionally, each PSB listing corresponding to a bid is identified on the display as a paid listing. If so, the bid amount may be included on the identification. In addition, the result list of the present invention is preferably combined with "non-paid" PSB descriptions; e.g. as with the numerous social benefits and other benefit programs provided by various government agencies, educational institutions, non-profit organizations, and the like. The combination of paid and unpaid listings helps ensure that the seeker will receive the most complete and relevant PSB results. Optionally, because the non-paid listings are considered to have a bid amount of zero, such listings may be located following/underneath the paid results.

According to a first embodiment of the present invention, there is provided a system and method for enabling PSB providers to influence a position for a PSB listing within a result list generated by a PSB matching engine. The provider first selects one or more criteria relevant to the PSB(s) to be listed. The provider influences the rank position for each listing through an ongoing online competitive bidding process with other providers. The bidding process occurs when a provider enters a new bid amount for an existing listing or enters a bid amount for a new listing. Preferably, the provider's bid is then processed in real or near real time. This bid amount is compared with all other bid amounts from other providers for the same criteria, with new rank values being generated for all listings having that criteria.

The rank value determines the position where the provider's web site description (and/or other contact and/or other information) will appear on the results page(s) that is generated once the questionnaire has been submitted to the matching engine by a PSB seeker. A higher bid will result in a higher rank value and a more advantageous placement, which is preferably near the beginning of the results list page. Though it could be virtually anything of value; preferably, the quantity

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used in the competitive bidding process is a money amount that the provider will pay to an owner of the matching engine each time the provider's web site is referred by the engine. Preferably, this money amount will be deducted from an account balance that is retained in the provider's account for 5 each time the provider's web site is referred by the engine.

One embodiment of the system and method of the present invention provides a database having accounts for the PSB providers. Each account includes contact and billing information for a provider. In addition, each account includes at 10 least one listing, each listing having preferably (though it could be more or less) five components: a description of the web site (and/or other contact/benefit information) to be listed, the Uniform Resource Locator (URL) of the web site, one or more criterion, a bid amount, and a title for the listing. 15 Each account may also include the provider's payment history and a history of listings entered by the user. The provider logs in to its account via an authentication process running on a preferably secure server. Once logged in, the provider may add, delete, or modify a listing. The functions of adding or 20 deleting a listing, or modifying the bid amount of a listing is to initiate the competitive bidding process described above. All listing changes and modifications are preferably processed substantially in real time to support the online competitive bidding process. Alternatively, the system operator or 25 an entity acting on its behalf may itself set up and manage (automatically and/or manually) an advertising program for a system client e.g., as may be desired by provider/advertisers without a web presence.

In another embodiment, seekers clicks on the providers' 30 listings may resolve not (just) to a web site, but could initiate any number of other commonly known to the arts contact/ information delivery channels e.g., e-mails or instant messages could be sent, letters mailed, pop-ups delivered, commercials initiated, phone calls made, personal visits 35 undertaken, etc. Any such "resolvation(s)" deemed suitable (e.g., by the system administrator and/or by one or more advertisers) for the system of the present invention may be utilized. Note, however, that the architecture for and procedures to implement resolvations is not conventional in the 40 system of the present invention as detailed herein.

The present invention is unique in that never before has there been an entity demographic, geographic, psychographic criteria targeted pay-for-performance system which allows product, service, and benefit provider/advertiser/promoters to pay for the exposure of their offerings to their desired targeted entities/marketplace(s) in real or substantially real time via a computer network. Further aspects of the present invention and many additional obvious advantages will become apparent during the course of the following description and by 50 reference to the attached drawings.

As used herein including the claims, the term "benefit(s)" shall be understood to mean any product(s) [including money and monetary equivalents, e.g., vouchers, certificates, coupons, etc] or service(s) with a discounted (including to as little as zero cost) rate or other added value available to a PSB-seeking entity in addition to those product(s) or service(s) otherwise offered to the general set/applicable (of) entity(ies) for which such discounted products or services are designed for and targeted to.

Benefits are therefore themselves products and services; the difference being that "benefits," as used herein, are products and services (including programs) made unique and special due to their discounted and/or value-added nature; targeted as they are to some subset of/within one or more entity type. Benefits, unlike usual "available for purchase and/or use by all" products and services, have at least one eligibility/

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qualification requirement which absolutely must be met in order for an entity to obtain/use it/them.

Such requirements (criteria/characteristics) may include such factors as where a person lives, how much they earn, size and make-up of family, current/past employment, spending habits, personal property owned (cars, computers, etc), personal interests and desires, etc; number of employees in a business, a company's location, gross revenues, net profit, equipment needs (firmograpics); population of a town, industries present, geographic size, its demographic makeup; student number of an educational facility, its location, courses of study offered, expansion desires; number of people served by a non-profit organization, its targeted constituency, percentage of funds used for operations, etc.

A match engine is, typically, a program (or coordinated set of programs) with related structure (database, interface, etc) able to match entities (individuals, businesses, governments, non-profit organizations, etc) with products, services, and benefits based on the geographic and/or demographic and/or psychographic and/or firmographic criteria/characteristics unique to each entity.

Such a match engine is described in detail in Ser. No. 09/832,440 by the same present inventor, entitled Method and Apparatus for the Furnishing of Benefits Information and Benefits. It is incorporated herein by reference in its entirety.

Other examples of match engines include those provided and administered by the U.S. Dept. of Labor (DOL) and the National Council on the Aging (NCOA); as found at their respective GovBenefits.gov and BenefitsCheckUp.org websites.

While there are a number of useful similarities, a principle, foundational difference between match engines and (Internet) search engines are that match engines' database(s) consist of an orderly collection of set-format, easily-identified, easily-correlated, easily-manipulated product, service, benefit information from any number of "member" companies and firms. Search engines, on the other hand, utilize algorithms, links, etc to "crawl" the unorganized, unstructured Internet in order to create a huge collection of disparate web (and other) pages of information from sources normally having no nexus of any type with the search engine itself; often in any number of disparate formats; usually gathered from some 100's of millions-or billions-of unrelated sources. Obtaining product, service, and benefit relevancy for system users with a match engine is therefore, unlike with search engines, a goal far more easily obtained.

Criteria (characteristics) are, essentially, the who, what, when, where, why, and how information/data/factors that are a part of/which correspond to all entities of all types; being most commonly of a demographic, geographic, psychographic (collectively; multigraphics), firmographic (generally, for non-human entities, i.e. companies, businesses, commercial enterprises, non-profits and charities, agencies, etc), interest/preference/desire nature.

"Seeker(s)" shall be understood to mean those entities desiring to obtain products, services, and benefits (and/or information concerning such) from the providers of such; and shall include individuals, businesses, and other commercial enterprises, non-profits and charities, governments, educational institutions, agencies, families, groups, organizations, enterprises, and any other entities of any type; including two or more of any of these entities acting together and in concert with one another. It is also to be understood that "(in) substantially (in) real time" also includes "in real time."

While in a preferred embodiment the current invention directs itself to combining products AND services AND benefits AND information together for maximum effectiveness,

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usefulness, and value; in alternative embodiments, it could easily also match entities to ONLY products, ONLY services, ONLY benefits, ONLY information; or to some combination of at least two of these four.

As it is a summary only and therefore in no way exhaustive of the present inventions numerous possible forms and embodiments, it is to be understood that the present inventions Summary is not intended to, and should accordingly not be used to, either limit the scope of the claims or to limit the invention to any particular embodiment(s) or to (a) precise form(s).

# BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWINGS

FIG. 1 is a block diagram illustrating the relationship between a large network and one embodiment of the system and method for generating a pay-for-performance Product/ Service/Benefit (PSB) match result of the present invention; 20

FIG. 2 is a chart of menus, display screens, and input screens used in one embodiment of the present invention;

FIG. 3 is a flow chart illustrating the advertiser user login process performed in one embodiment of the present invention:

FIG. 4 is a flow chart illustrating the administrative user login process performed in one embodiment of the present invention;

FIG. 5 is a diagram of data for an account record for use with one embodiment of the present invention;

FIG. 6 is a flow chart illustrating a method of adding money to an account record used in one embodiment of the present invention:

FIG. 7 illustrates an example of a PSB match result list generated by one embodiment of the present invention;

FIG. 8 is a flow chart illustrating a change bids process used in one embodiment of the present invention;

FIG. 9 illustrates an example in one embodiment of a screen display used in the change bids process of FIG. 8; and FIG. 10 illustrates an example of a seeker questionnaire used in one embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE INVENTION

Methods and systems for generating a pay-for-performance product/service/benefit result determined by a site promoter, such as an advertiser, over a client/server based computer network system are disclosed. The following description is presented to enable any person skilled in the art to make and use the invention. For purposes of explanation, specific nomenclature is set forth to provide a thorough understanding of the present invention. Descriptions of specific applications are provided only as examples. Various modifications to the preferred embodiments will be readily apparent to those skilled in the art, and the general principles defined herein may be applied to other embodiments and applications without departing from the spirit and scope of the invention and its claims.

By way of example and not limitation, those skilled in the 60 art will appreciate that the invention may be practiced with various computer system configurations, including hand-held devices, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs, minicomputers, mainframe computers, other types of suitable 65 computing devices, TV set-top boxes, cell phones, and the like.

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Thus, the present invention is not intended to be limited to the embodiments shown, but is to be accorded the widest scope consistent with the principles and features disclosed herein.

Referring now to the drawings, FIG. 1 is an example of a distributed system 10 configured as client/server architecture used in a preferred embodiment of the present invention. A "client" is a member of a class or group that uses the services of another class or group to which it is not related. In the context of a computer network, such as the Internet, a client is a process (i.e. roughly a program or task) that requests a service which is provided by another process, known as a server program. The client process uses the requested service without having to know any working details about the other server program or the server itself. In networked systems, a client process usually runs on a computer that accesses shared network resources provided by another computer running a corresponding server process. However, it should also be noted that it is possible for the client process and the server process to run on the same computer.

A "server" is typically a remote computer system that is accessible over a communications medium such as the Internet. The client process may be active in a second computer system, and communicate with the server process over a communications medium that allows multiple clients to take advantage of the information-gathering capabilities of the server. Thus, the server essentially acts as an information provider for a computer network.

The block diagram of FIG. 1 therefore shows a distributed system 10 comprising a plurality of client computers 12, a plurality of advertiser web servers 14, an account management server 22, and a match engine web server 24, all of which are connected to a network 20. The network 20 will be hereinafter generally referred to as the Internet. Although the system and method of the present invention is specifically useful for the Internet, it should be understood that the client computers 12, advertiser web servers 14, account management server 22, and match engine web server 24 may be connected together through one of a number of different types of wired and/or wireless networks. Such networks may include local area networks (LANs), other wide area networks (WANs), and regional networks accessed over telephone lines, cable, wireless; such as commercial information services. The client and server processes may even comprise different programs executing simultaneously on a single

The client computers 12 can be conventional personal computers (PCs), workstations, computer systems, etc. Each client 12 typically includes one or more processors, memories, input/output devices, and a network interface, such as a conventional modem. The advertiser web servers 14, account management server 22, and the match engine web server 24 can be similarly configured. However, advertiser web servers 14, account management server 22, and match engine web server 24 may each include many computers connected by a separate private network. In fact, the network 20 may include hundreds of thousands of individual networks of computers.

The client computers 12 can execute web browser programs 16, such as the NAVIGATOR, EXPLORER, or FIRE-FOX browser programs, to locate the web pages or records 30 stored on advertiser server 14. The browser programs 16 allow the users to enter addresses of specific web pages 30 to be retrieved. These addresses are referred to as Uniform Resource Locators, or URLs. In addition, once a page has been retrieved, the browser programs 16 can provide access to other pages or records when the user "clicks" on hyperlinks to other web pages. Such hyperlinks are located within the web

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pages 30 and provide an automated way for the user to enter the URL of another page and to retrieve that page. The pages can be data records including as content plain textual information, or more complex digitally encoded multimedia content, such as software programs, graphics, audio signals, videos, and so forth.

In a preferred embodiment of the present invention, shown in FIG. 1, client computers 12 communicate through the network 20 with various product, service, and benefit providers, including account management server 22, match engine server 24, and advertiser servers 14 using the functionality provided by a Hypertext Transfer Protocol (HTTP), although other communications protocols, such as FTP, SNMP, TELNET, and a number of other protocols known in the art, may be used. Preferably, match engine server 24, account management server 22, and advertiser servers 14 are located on the World Wide Web.

As discussed above, at least two types of server are contemplated in a preferred embodiment of the present invention. The first server contemplated is an account management 20 server 22 comprising a computer storage medium 32 and a processing system 34. A database 38 is stored on the storage medium 32 of the account management server 22. The database 38 contains advertiser account information. It will be appreciated from the description below that the system and 25 method of the present invention may be implemented in software that is stored as executable instructions on a computer storage medium, such as memories or mass storage devices. on the account management server 22. Conventional browser programs 16, running on client computers 12, may be used to 30 access advertiser account information stored on account management server 22. Preferably, access to the account management server 22 is accomplished through a firewall, not shown, which protects the account management and match result placement programs and the account information from exter- 35 nal tampering. Additional security may be provided via enhancements to the standard communications protocols such as Secure HTTP or the Secure Sockets Layer.

The second server type contemplated is a match engine web server 24. A match engine program permits network users, upon navigating to the match engine web server URL or sites on other web servers capable of submitting queries to the match engine web server 24 through their browser program 16, to complete at least in part at least one questionnaire containing question(s) applicable to network users; the questions being preferably demographic, geographic, psychographic (multigraphic) in nature; in order to identify products, services, and benefits (PSBs) of interest to network users.

In a preferred embodiment of the present invention, the match engine web server 24 generates a match result list that 50 includes relevant entries obtained from and formatted by, at least in part, the results of the bidding process conducted by the account management server 22. The match engine web server 24 generates a list of hypertext links to documents that contain information relevant to PSB criteria entered by the user at the client computer 12. The match engine web server transmits this list, in the form of a web page, to the network user, where it is displayed on the browser 16 running on the client computer 12. In addition, the match result list web page, an example of which is presented in FIG. 7, will be 60 discussed below in further detail.

Match engine web server 24 is connected to the Internet 20. In a preferred embodiment of the present invention, match engine web server 24 includes a match database 40 comprised of PBS listing records used to generate match results in 65 response to user queries. In addition, match engine web server 24 may also be connected to the account management server

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22. Account management server 22 may also be connected to the Internet. The match engine web server 24 and the account management server 22 of the present invention address the different information needs of the users located at client computers 12.

For example, one class of users located at client computers 12 may be PSB providers such as advertising web site promoters or owners having advertiser web pages 30 located on advertiser web servers 14. These advertising web site promoters, or advertisers, may wish to access account information residing in storage 32 on account management server 22. An advertising web site promoter may, through the account residing on the account management server 22, participate in a competitive bidding process with other advertisers. An advertiser may bid on any number of PSB criteria relevant to the content of the advertiser's offerings and/or its web site. In one embodiment of the present invention, the relevance of one or more bidded criteria to an advertiser's web site is determined through a manual editorial process prior to insertion of the PSB listing containing the criteria and advertiser web site URL into the database 40. In an alternate embodiment of the present invention, the relevance of one or more bidded criteria in a PSB listing to the corresponding web site may be evaluated using a computer program executing at processor 34 of account management server 22, where the computer program will evaluate the criteria and corresponding web site according to a set of predefined editorial rules.

The higher bids receive more advantageous placement on the PSB result list page generated by the match engine 24 when a match request using the criteria bid on by the advertiser is executed. In a preferred embodiment of the present invention, the amount bid by an advertiser comprises a money amount that is deducted from the account of the advertiser for each time the advertiser's web site is accessed via a hyperlink on the PSB result list page. A PSB seeker "clicks" on the hyperlink with a computer input device to initiate a retrieval request to retrieve the information associated with the advertiser's hyperlink. Preferably, each access or "click" on a PSB result list hyperlink will be redirected to the match engine web server 24 to associate the "click" with the account identifier for an advertiser.

This redirect action, which is not readily apparent to the seeker, will access account identification information coded into the PSB result page before accessing the advertiser's URL using the PSB result list hyperlink clicked on by the seeker. The account identification information is recorded in the advertiser's account along with information from the retrieval request as a retrieval request event. Since the information obtained through this mechanism conclusively matches an account identifier with a URL in a manner not possible using conventional server system logs known in the art, accurate account debit records will be maintained. Optionally, the advertiser's web site description and hyperlink on the PSB result list page is accompanied by an indication that the advertiser's listing is a paid listing. Optionally, each paid listing displays a "cost to advertiser," which is an amount corresponding to a "price-per-click" paid by the advertiser for each referral to the advertiser's site through the PSB result list.

A second class of users at client computers 12 may comprise seekers seeking specific information on the web. The seekers may access, through their browsers 16, a match engine web page 36 residing on web server 24. The match engine web page 36 includes a questionnaire in which a seeker may type or otherwise enter answers to one or more questions concerning the seeker. Alternatively, the seeker may query the match engine web server 24 through a ques-

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tionnaire hyperlinked to the match engine web server 24 and located on a web page stored at a remote web server. When the seeker has finished completing anywhere from one to, preferably, a required all of the questions in the questionnaire containing one or more questions, the seeker may transmit the query to the match engine web server 24 by clicking on a provided hyperlink. The match engine web server 24 will then generate a match result list page and transmit this page to the seeker at the client computer 12.

The seeker may click on the hypertext links associated with each listing on the PSB results page to access the corresponding web pages. The hypertext links may access web pages anywhere on the Internet, and include paid listings to advertiser web pages 30 located on advertiser web servers 14. In a preferred embodiment of the present invention, the match 15 result list also includes non-paid listings that are not placed as a result of advertiser bids. The non-paid hypertext links may also include links manually indexed into the database 40 by an editorial team. Preferably, non-paid listings may appear among the paid advertiser listings. Optionally, the non-paid listings follow the paid advertiser listings on the match results page.

FIG. 2 is a diagram showing menus, display screens, and input screens presented to an advertiser accessing the account management server 22 through a conventional browser program 16. The advertiser, upon entering the URL of the account management server 22 into the browser program 16 of FIG. 1, invokes a login application, discussed below as shown at screen 110 of FIG. 2, running on the processing system 34 of the server 22. Once the advertiser is logged-in, 30 the processing system 34 provides a menu 120 that has a number of options and further services for advertisers. These items, which will be discussed in more detail below, cause routines to be invoked to either implement the advertiser's request or request further information prior to implementing 35 the advertiser's request.

In one embodiment of the present invention, the advertiser may access several options through menu 120, including requesting customer service 130, viewing advertiser policies 140, performing account administration tasks 150, adding money to the advertiser's account 160, managing the account's advertising presence on the match engine 170, and viewing activity reports 180. Context-specific help 190 may also generally be available at menu 120 and all of the abovementioned options.

The login procedure of the preferred embodiment of the present invention is shown in FIGS. 3 and 4 for two types of user. FIG. 3 shows the login procedures 270 for an advertiser. FIG. 4 shows the login procedures 290 for an administrator managing and maintaining the system and method of the 50 present invention. As discussed above, the advertiser or administrator at a client computer 12 must first use a browser program at steps 271 or 291 to access the account management server. After the advertiser navigates to the URL of the login page to start the login process at step 272 or 292, the 55 processing system 34 of the account management server 22 invokes a login application at steps 274 or 294. According to this application, the processor provides an input screen 110 (FIG. 2) that requests the advertiser's or administrator's user name and password. These items of information are provided 60 at steps 276 or 295 to a security application known in the art for the purpose of authentication, based on the account information stored in a database stored in storage 32 of account management server 22.

According to FIG. 3, after the user has been authenticated 65 as an advertiser, the advertiser is provided with the menu screen 120 of FIG. 2 and limited read/write access privileges

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only to the corresponding advertiser account, as shown in step 278. The advertiser login event 278 may also be recorded in step 280 in an audit trail data structure as part of the advertiser's account record in the database. The audit trail is preferably implemented as a series of entries in database 38, where each entry corresponds to an event wherein the advertisers account record is accessed. Preferably, the audit trail information for an account record may be viewed by the account owner and other appropriate administrators.

However, if the user is authenticated as an administrator in step 295 of FIG. 4, the administrator is provided with specified administrative access privileges to all advertiser accounts as shown in step 296. The administrator login event 296 is recorded in step 297 in the audit trail data structure portion of the administrator's account record. This audit trail is preferably implemented as a series of entries in database 38, where each entry corresponds to an event wherein the administrators account record is accessed. Most preferably, the administrator's audit trail information may be viewed by the account owner and other appropriate administrators.

Furthermore, instead of the general advertiser main menu shown to the authenticated advertiser users in step 282, the authenticated administrator is provided in step 298 with access to search the database 38 of advertiser accounts. Preferably, a database search interface is provided to the administrator that enables the administrator to select an advertiser account to monitor.

For example, the interface may include query boxes in which the administrator may enter an account number or username or contact name corresponding to an account the administrator wishes to access. When the administrator selects an advertiser account to monitor in step 299, the administrator is then brought to the main advertiser page 120 of FIG. 2, which is also seen by the advertisers.

Access to the account information 32 located on the account management server 22 is restricted to users having an account record on the system, as only those users are provided with a valid login name and password. Password and login name information is stored along with the user's other account information in the database 38 of the account management server 22, as shown in FIG. 1. Account information, including a login user name and password, is entered in the database 38 of FIG. 1 via a separate online registration process that is outside the scope of the present invention.

FIG. 5 is a diagram showing the types of information contained in each advertiser account record 300 in the database. First, an advertiser account record 300 contains a username 302 and a password 304, used for online authentication as described above. The account record also contains contact information 310 (e.g., contact name, company name, street address, phone, e-mail address).

Contact information 310 is preferably utilized to direct communications to the advertiser when the advertiser has requested notification of key advertiser events under the notification option, discussed below. The account record 300 also contains billing information 320 (e.g., current balance, credit card information). The billing information 320 contains data accessed when the advertiser selects the option to add money to the advertiser's account. In addition, certain billing information, such as the current balance, may trigger events requiring notification under the notification option. The audit trail section 325 of an account record 300 contains a list of all events wherein the account record 300 is accessed. Each time an account record 300 is accessed or modified, by an administrator or advertiser, a short entry describing the account access and/or modification event will be appended to the audit trail section 325 of the administrator or advertiser account

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that initiated the event. The audit trail information may then be used to help generate a history of transactions made by the account owner under the account.

The advertising information section 330 contains information needed to conduct the online bidding process of the 5 present invention, wherein a position is determined for preferably a web site description and hyperlink within a product/ service/benefit (PSB) result list generated by a match engine. The advertising data 330 for each user account 300 may be organized as zero or more subaccounts 340. Each subaccount 340 comprises at least one PSB listing 344. Each PSB listing corresponds to a bid on one or more PSB criteria. An advertiser may utilize subaccounts to organize multiple bids on multiple PSB criteria sets (corresponding to multiple PSBs), or to organize bids for multiple web sites. Subaccounts are also particularly useful for advertisers seeking to track the performance of targeted market segments. The subaccount superstructure is introduced for the benefit of the advertisers seeking to organize their advertising efforts, and does not 20 affect the method of operation of the present invention.

Alternatively, the advertising information section need not include the added organizational layer of subaccounts, but may simply comprise one or more PSB listings.

The PSB listing 344 corresponds to at least one criteria/bid 25 pairing and contains key information to conduct the online competitive bidding process. Preferably, each PSB listing comprises the following information: PSB criteria 352, web site description 354, URL 356, bid amount 358, and a title 360. The PSB criteria 352 comprises one or more criteria 30 factors, preferably of a demographic, geographic, psycographic, preference/interest nature (in any language). Each criterion factor in turn comprises a character string. The PSB criteria is the object of the competitive online bidding process. The advertiser selects at least one PSB criterion to bid on 35 that is relevant to the content of the advertiser's web site and/or to their product, service, benefit, informational offering(s). Ideally, the advertiser may select (a) PSB criteria that is/are targeted to entity information/criteria entered by seekers desiring the information on the advertiser's web site, their 40 products, services, benefits and/or information; although less common/less related PSB criteria may also be selected to ensure comprehensive coverage of relevant entity criteria for

The web site description 354 is a textual (optionally; and/or 45 visual, audio, etc) description (of any suitable length/size) of the content of the advertiser's web site (and/or their PSB[s]) and may be displayed as part of the advertiser's entry in a PSB result list. The PSB listing 344 may also contain a title 360 of the web site that may be displayed as the hyperlinked heading 50 to the advertiser's entry in a PSB result list. The URL 356 contains the Uniform Resource Locator address of the advertiser's web site. When the user clicks on the hyperlink provided in the advertiser's result list entry, the URL is provided to the browser program. The browser program, in turn, 55 accesses the advertiser's web site through the redirection mechanism discussed above. The URL may also be displayed as part of the advertiser's entry in a PSB result list. Alternatively, since millions of product, service, and benefit providers (especially small to medium sized companies and profes- 60 sional practices) do not have web sites, the current invention's system administrator itself may optionally provide such web sites, "landing pages," and/or other "destinations" where further information, and/or including contact information, concerning these providers may be provided/displayed to the 65 PSB seeker; thereby negating the need for a PSB provider to have a web site, web site title, or URL.

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The bid amount 358 preferably is a money amount bid by an advertiser for a listing. This money amount is deducted from the advertiser's prepaid account or is recorded for advertiser accounts that are invoiced for each time a match request is executed by a user on the corresponding PSB criteria and the PSB result list hyperlink is used to refer the seeker to the advertiser's web site. Finally, a rank value is a value generated dynamically, preferably by the processing system 34 of the account management server 22 shown in FIG. 1, each time an advertiser places a bid or a seeker enters a PSB query. The rank value of an advertiser's PSB listing determines the placement location of the advertiser's entry in the PSB result list generated when a PSB match request is executed on the corresponding PSB criteria. Preferably, rank value is an ordinal value determined in a direct relationship to the bid amount 358; the higher the bid amount, the higher the rank value, and the more advantageous the placement location on the PSB result list.

Most preferably, the rank value of 1 is assigned to the highest bid amount with successively higher ordinal values (e.g., 2, 3, 4, . . . ) associated with successively lower ranks and assigned to successively lower bid amounts.

In one embodiment, each bid may be dependent upon or require satisfaction of various criteria which must be met in order for the bid amount to remain the same; or for the listing to remain on the results list and displayed to a seeker at all. For example, thanks to the current invention's dynamic, substantially in real time nature, an advertiser might specify that for the first 1,000 times within a given time period, every time their listing is clicked, they are paying \$2.37/click. Thereafter (though the position of their listing will normally drop for doing so), for the remainder of the given time period, they will pay \$1.02/click. Alternatively, the advertiser could elect to have their listing dropped entirely after those 1,000 clicks. In another example, an advertiser could designate a certain time of day (time zone determinate), only during which its listings are to appear. It is to be understood that the amount bid may be dependent on as many criteria as is deemed desirable by the system operator and its advertisers. As can be readily seen, a virtually limitless number of bidding parameters, whether simple or complex, may be readily utilized with the current system; all being well within the present invention's scope.

Once logged in, an advertiser can perform a number of straightforward tasks set forth in menu 120 of FIG. 2, including viewing a list of rules and policies for advertisers, and requesting customer service assistance. These items cause routines to be invoked to implement the request. For example, when "Customer Service" is selected, an input screen 130 is displayed to allow the advertiser to select the type of customer service requested. In addition, forms may be provided on screen 130 so that an advertiser may type a customer comment into a web-based input form.

When "View Advertiser Policies" is selected, a routine will be invoked by processing system 34 of the account management server 22 FIG. 1. As shown in FIG. 2, the routine will display an informational web page 140. The web page 140 sets forth the advertiser policies currently in effect (e.g., "All PSB listing descriptions must clearly relate to the PSB criteria").

Menu 120 of FIG. 2 also includes an "Account Administration" selection 150 which allows an advertiser, among other things, to view and change the advertiser's contact information and billing information, or update the advertiser's access profile, if any. Web-based forms well known in the art and similar to those discussed above are provided for updating account information.

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The "Account Administration" menu also includes a selection enabling an advertiser to view the transaction history of the advertiser's account. Under the "View Transaction History" selection, the advertiser may invoke routines to view a listing of past account transactions (e.g., adding money to account, adding or deleting bidded PSB criteria, or changing a bid amount). Additional routines may be implemented to permit advertisers to display a history of transactions of a specified type, or that occur within a specified time frame. The transaction information may be obtained from the audit trail list 325 of FIG. 5, described above.

Clickable buttons that may be implemented in software, web-based forms, and/or menus, etc. may be provided as known in the art to enable advertisers to specify such limitations.

In addition, the "Account Administration" menu 150 of FIG. 2 includes a selection enabling an advertiser to set notification options. Under this selection, the advertiser may select options that will cause the system to notify the advertiser when certain key events have occurred. For example, the 20 advertiser may elect to set an option to have the system send conventional electronic mail messages to the advertiser when the advertiser's account balance has fallen below a specified level. In this manner, the advertiser may receive a "warning" to replenish the account before the account is suspended 25 (meaning the advertiser's listings will no longer appear in PSB result lists). Another key event for which the advertiser may wish notification is a change in position of an advertiser's listing in the PSB result list generated for (a) particular PSB criteria. For example, an advertiser may wish to have the 30 system send a conventional electronic mail message to the advertiser if the advertiser has been outbid by another advertiser for a particular PSB criteria (set) (meaning that the advertiser's listing may appear in a position farther down on the PSB result list page than previously). When one of the 35 system-specified key events occurs, a database search is triggered for each affected PSB listing. The system will then execute the appropriate notification routine in accordance with the notification options specified in the advertiser's account. Preferably, advertiser has previously established 40 various parameters in its account 170 whereby when such notifications are "sent out," preferably notification-concurrent actions are automatically taken to address the condition(s) present which caused the notification in the first place e.g., as in the case where the notified advertiser's bid on 45 a given PSB criteria is automatically increased by some amount as a result of another competing advertiser's change in position within the PSB result list.

Referring back to FIG. 2, a selection also appears in menu 120 that permits an advertiser to add money to the advertiser's 50 account, so that the advertiser will have funds in their account to pay for referrals to the advertiser's site through the PSB results page. Preferably, only advertisers with funds in their advertiser's accounts may have their paid listings included in any PSB result lists generated. Most preferably, advertisers 55 meeting selected business criteria may elect, in place of maintaining a positive account balance at all times, incur account charges regardless of account balance and pay an invoiced amount at regular intervals which reflects the charges incurred by actual referrals to the advertiser's site generated 60 by the match engine. The process that is executed when the "Add Money to Account" selection is invoked is shown in further detail in FIG. 6, beginning at step 602. When the "Add Money to Account" selection is clicked in step 604, a function is invoked which receives data identifying the advertiser and 65 retrieves the advertiser's account from the database. The executing process then stores the advertiser's default billing

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information and displays the default billing information for the advertiser in step 606. The displayed billing information includes a default amount of money to be added, a default payment type, and default instrument information.

In the preferred embodiment of the present invention, an advertiser may add funds online and substantially in real time through the use of a credit card, although the use of other payment types are certainly well within the scope of the present invention. For example, in an alternate embodiment of the present invention, advertisers may add funds to their account by transferring the desired amount from the advertiser's bank account through an electronic funds verification mechanism known in the art such as debit cards, in a manner similar to that set forth in U.S. Pat. No. 5,724,424 to Gifford. In another alternate embodiment of the present invention, advertisers can add funds to their account using conventional paper-based checks. In that case, the additional funds may be updated in the account record database through manual entry. The instrument information includes further details regarding the type of payment. For example, for a credit card, the instrument information may include data on the name of the credit card (e.g., MasterCard, Visa, or American Express), the credit card number, the expiration date of the credit card, and billing information for the credit card (e.g., billing name and

In a preferred embodiment of the present invention, only a partial credit card number is displayed to the advertiser for security purposes.

The default values displayed to the advertiser are obtained from a persistent state, e.g., stored in the account database. In an embodiment of the present invention, the stored billing information values may comprise the values set by the advertiser the last (e.g. most recent) time the process of adding money was invoked and completed for the advertiser's account. The default billing information is displayed to the advertiser in a web-based form. The advertiser may click on the appropriate text entry boxes on the web-based form and make changes to the default billing information. After the advertiser completes the changes, the advertiser may click on a hyperlinked "Submit" button provided on the form to request that the system update the billing information and current balance in step 608. Once the advertiser has requested an update, a function is invoked by the system which validates the billing information provided by the advertiser and displays it back to the advertiser for confirmation, as shown in step 610. The confirmation billing information is displayed in read-only form and may not be changed by the advertiser.

The validation step functions as follows. If payment is to be debited from an advertiser's external account, payment may be authenticated, authorized and completed using the system set forth in U.S. Pat. No. 5,724,424 to Gifford. However, if the payment type is by credit card, a validating algorithm is invoked by the system, which validates the credit card number using a method such as that set forth in U.S. Pat. No. 5,826, 241 to Stein et al. The validating algorithm also validates the expiration date via a straightforward comparison with the current system date and time. In addition, the function stores the new values in a temporary instance prior to confirmation by the advertiser.

Once the advertiser ascertains that the displayed data is correct, the advertiser may click on a "Confirm" button provided on the page to indicate that the account should be updated in step 612. In step 612, a function is invoked by the system which adds money to the appropriate account balance, updates the advertisers billing information, and appends the billing information to the advertiser's payment history. The

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advertiser's updated billing information is stored to the persistent state (e.g., the account record database) from the temporary instance.

Within the function invoked at step 612, a credit card payment function may be invoked by the system at step 614. 5 In an alternate embodiment of the present invention, other payment functions such as debit card payments may be invoked by defining multiple payment types depending on the updated value of the payment type.

If the payment type is credit card, the user's account is credited immediately at step 616, the user's credit card having already been validated in step 610. A screen showing the status of the add money transaction is displayed, showing a transaction number and a new current balance, reflecting the amount added by the just-completed credit card transaction.

In an alternate embodiment of the present invention, after the money has been added to the account, the amount of money added to the account may be allocated between sub-accounts the end of the add money process at step 616. If the advertiser has no subaccounts, all of the money in the account 20 is a general allocation. However, if the advertiser has more than one subaccount, the system will display a confirmation and default message prompting the advertiser to "Allocate Money Between Subaccounts".

The menu selection "Allocate Money Between Subac- 25 counts" may be invoked when money is added to the advertiser account after step 616 of FIG. 6, or it may be invoked within the "Account Management" menu 170 shown in FIG. 2. The "Account Management" menu 170 is accessible from the Advertiser Main Page 120, as shown in FIG. 2. This 30 "Allocate Money Between Subaccounts" menu selection permits an advertiser to allocate current and any pending balances of the advertiser's account among the advertisers subaccounts. The system will then update the subaccount balances. The current balance allocations will be made in real 35 or near real time, while the pending balance allocations will be stored in the persistent state. A routine will be invoked to update the subaccount balances to reflect the pending balance allocations when the payment for the pending balance is processed. Automatic notification may be sent to the adver- 40 tiser at that time, if requested. This intuitive online account management and allocation permits advertisers to manage their online advertising budget quickly and efficiently. Advertisers may replenish their accounts with funds and allocate their budgets, all in one easy web-based session. The com- 45 puter-based implementation eliminates time consuming, high cost manual entry of the advertiser's account transactions.

The "Allocate Money Between Subaccounts" routine begins when an advertiser indicates the intent to allocate money by invoking the appropriate menu selection at the 50 execution points indicated above. When the advertiser indicates the intent to allocate, a function is invoked by the system to determine whether there are funds pending in the current balance (i.e., unactivated account credits) that have not yet been allocated to the advertiser's subaccounts, and displays 55 the balance selection options. In a preferred embodiment of the present invention, an account instance is created and a pending current balance account field is set from the persistent state.

If there are no unallocated pending funds, the system may 60 display the current available balances for the account as a whole as well as for each subaccount. The advertiser then distributes the current available balance between subaccounts and submits a request to update the balances. A function is invoked which calculates and displays the current running 65 total for subaccount balances. The current running total is stored in a temporary variable which is set to the sum of

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current balances for all subaccounts for the specified advertiser. The function also validates the new available subaccount balances to make sure that the total does not exceed the authorized amount. If the new advertiser-set available subaccount balances does not exceed the authorized amount, a function is invoked which will update all of the subaccount balances in the persistent state and display the update in read-only format.

If there are pending funds in the current account balance, the pending funds must be allocated separately from the available current balance. The pending funds will then be added into the available current balance when the funds are received. The function must therefore prompt the advertiser to choose between allocating pending funds or allocating available funds. The allocating pending funds selection works in much the same manner as the allocating available funds selection outlined above. After the advertiser chooses to allocate pending funds, a routine is invoked to display current pending balances for the account and the subaccounts. The advertiser distributes the pending subaccount balances between campaigns and submits a request to update the balances. A function is invoked which calculates and displays the current running totals for the pending subaccount balances. This function also validates the new pending subaccount allocations to make sure that the allocations do not exceed any authorized amount. The current running total of pending allocations is set to the sum of current pending balances for all subaccounts for the advertiser. If the new user-set pending subaccount balances or the total of such balances do not exceed any authorized amount, the function will update all of the pending subaccount allocations in the persistent state, e.g. the advertiser's account in the database, and display the update in read-only format.

As indicated above and shown in FIG. 2, a routine displaying the account management menu 170 may be invoked from the advertiser main menu 120. Aside from the "Allocate Money Between Subaccounts" selection described above, the remaining selections all use to some extent the PSB criteria present in the advertiser's account on the database, and may also affect the advertiser's entry in the PSB result list. Thus, a further description of the PSB result list generated by the match engine is provided at this point.

When a remote product/service/benefit/information seeker accesses the questionnaire/criteria query page on the match engine web server 24 and executes a PSB match request according to the procedure described previously, the match engine web server 24 preferably generates and displays a PSB result list where one or more criteria of preferably each PSB listing in the PSB result list preferably exactly matches at least one of the PSB criteria of the match request query entered by the remote seeker.

Alternatively, "canonicalized" criteria of (a) PSB listing(s) in the PSB result list may preferably exactly match the canonicalized match request query entered by the remote seeker.

The canonicalization of criteria factors/terms (when applicable) used in queries and PBS listings removes common irregularities of criteria factors/terms entered by seekers and web site promoters (product/service/benefit/information providers); such as capital letters and pluralizations, in order to generate relevant results. In another embodiment, the match engine web server 24 may generate and display a PSB result list where one or more criteria of at least one PSB listing in the PSB result list does not exactly match at least one of the PSB criteria of the match request query entered by the remote seeker.

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However, alternate schemes for determining a match between the criteria of the PSB listing and the match request query entered by the remote seeker are well within the scope of the present invention. For example, string matching algorithms known in the art may be employed to generate matches where the PSB criteria of the PSB listing and the match request query have the same root but are not exactly the same (e.g., reader vs. reading). Alternatively a thesaurus database of synonyms may be stored at match engine web server 24, so that matches may be generated for (a) PSB criteria having synonyms. Internationalization methodologies may be employed to refine PSB match requests for users outside the United States. For example, country or language-specific PSB results may be generated, by a cross-reference of the advertiser account database.

Numerous types/versions/formats/presentations/instantiations of the questionnaire/survey/profile e.g.; including variations in the number, type, and format of the questions/data asked/supplied, including preferably those of a demographic, geographic, psychographic, firmographic, preference/inter- 20 est/usage/future usage nature; the answers to be supplied by the PSB seekers, with or without personally-identifying information, etc, have been used for many decades and are well within the knowledge of those in the art. Accordingly, no attempt will be made here to attempt to detail every possible 25 version of such standard questionnaires/surveys/profiles, as the options are virtually limitless. Any questionnaire deemed suitable (e.g., by the system administrator) for the system of the present invention may be utilized. Note, however, that the architecture for and procedures to implement questionnaires 30 is not conventional, in the bidded-position, pay for performance system of matching PSB providers with PSB seekers as detailed herein.

The questionnaire may use any means suitable to complete the questionnaire e.g., click on an icon, place an "X," "check," 35 or other mark on, next to, or nearby a selection, fill in a box, drop-down menus; or any other means known in the art for indicating a choice or selection of one or more items from a list on or off of a web page. The questionnaire may also make use of specific numbers and figures, letters and letter combi- 40 nations, number/letter combinations, words, range(s), range(s) of number(s), value range(s), etc; and/or any other means as is well known in the art for completing the questions of a questionnaire on or off of a web page. FIG. 10 illustrates an example of a seeker questionnaire which may be used in 45 one embodiment of the present invention. While in a preferred embodiment, all the questions are "closed-ended;" that is, where a seeker is given a finite selection of specified answers from which to choose for each question; in another embodiment, one or more of the questions may be "open- 50 ended," where there are no specific, predetermined answer(s), and seeker is free to "share its thoughts" in their own words.

In such an "open-ended" embodiment, the well-known-tothe-arts natural language processing (NLP) (computational linguistics) or some other method as is well known to the arts may be used in order to assist the system operator in minimizing human involvement in the correlation of the seeker's questionnaire information with that of the advertisers chosen criteria.

Possible questionnaire questions/data requests for individuals may include name, address, e-mail address, telephone number, date of birth/age, income (exact dollar amount or range), marital status, presence of children (number, ages, sex), occupation, education level, credit cards used, credit score(s), whether homeowner or renter, interests and activities (e.g., bicycling, golf, running, bowling, snow/water skiing, reading, fishing, crafts, Internet surfing, photography,

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travel [cruise, car, plane, train], wines, coin/stamp collecting, watching TV, etc.). Also; products owned/used (auto make, model, year; when/where/why/how bought/paid for), services used, current/future intentions (with or without time periods/ranges; getting married, having a baby, buying/selling a home; buying/leasing a new vehicle, RV, boat, aircraft, or any other product, etc), medical/health status and conditions present (asthma, arthritis, high blood pressure, cancer, etc), types of investments made, social concerns, insurance types held/desired, musical preferences, nutrition and diet.

In other "non-human" entity system applications (e.g. business to business, business to government, government to government, etc.), the requisite questionnaire(s) will of necessity utilize questions and "data indicators" appropriate to those applications and markets (e.g. firmographics) These other-entity applications are well within the scope of the all-entity enablement of the present invention.

Preferably, personally-identifying questions are excluded from the questionnaire in order to maximize system's desirability and use by seekers. If any individual advertisers desire to require personal information (or other information not initially requested by the system's initial questionnaire) as a condition of-or to qualify for-obtaining their offering(s) (such as with government programs, tobacco and alcohol companies, etc), such information may optionally be collected after the seeker has submitted its match query but before delivery of the advertiser's information concerning its product, service, benefit, or information offering(s) to the seeker; via the presentation/delivery to the seeker of an additional or supplemental questionnaire to be completed. In a similar manner, additional questions may be presented to the seeker, at any time during the process, depending, for example, on seeker's answers/responses to various questions as seeker proceeds through the questionnaire (e.g., as when clicking from one page of a questionnaire to the next). This may be repeated any number of times as is deemed suitable.

Though the present system is fully operational with as few as one question (e.g., just the seeker's zip code, city, or sex) in the questionnaire being answered; the more questions answered, and answered as precisely as possible, the more comprehensive and useful the system is to the seeker (and to the advertisers). Accordingly, it is to be understood that the present invention does not require that the presented questionnaire be completed in its entirety by the seeker in order to be presented with a results list; only that at least one of the questions/data fields of the questionnaire be answered/completed; in order to produce matches with at least some of the advertiser(s).

That said, in order to maximize the systems effectiveness and usefulness to all parties (the advertiser/providers, the seekers, and the system operator), in a most preferred embodiment the system operator does require that the questionnaire be completed in its entirety in order to receive a result list. Alternatively, at least one or more certain "high importance" specified question(s) may be required to be completed/answered in order for seekers to receive a results list at all. No attempt shall be made here to list all possible modifications and variations given the near impossibility of doing so. Any and all such options/embodiments are well within the scope of the present invention.

It is to be understood that alternate schemes for obtaining the needed information/data from entities for its correlation with the advertiser/providers are well within the scope of the present invention. While their use is preferred, questionnaire/ survey/profiles are not required. For example, entity match requests may be integrated in whole or in part with existing or future search engine technologies/methodologies (or even

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other applications), e.g., instead of the use of a questionnaire in order to obtain the needed entity criteria, an entity could simply enter one or more of their criterion directly into a search engines query box/field (even optionally along with one or more search terms) e.g., as in the following (or some 5 similar or related) manner:

\$50,000-\$74,999+F+37+CA+91360+MC+Sports;

wherein this data corresponds to:

Household Income+Sex+Age+State of Residence+Zip Code+whether or not Minor Children are in the household+Likes/Dislikes/Hobbies/Activities

Drop down boxes may be utilized to quickly and easily guide a seeker through such a process. As is obvious, in such a version, some type of indication/election will of necessity need to be made by entity in order to designate that a match request is being made of the match engine; either instead of, in addition to, or subsequent to a search request being conducted on the search engine; in order for seeker to obtain the PSB result list they desire. This is so, because, as is now understood; search engines by definition are unable to produce match results just as match engines by definition are unable to produce search results. In a related embodiment, an additional (preferably close to the search box) query/field box separate from the search query/field box may be used in this manner; preferably where the match request is processed at substantially the same time as the search request is. In this way, the curious and anxious searcher/seeker will concurrently discover both what they're looking for (via Search and Match) AND what they didn't know was already theirs to claim (via Match). Any and all such "questionnaire-free" criteria-acquisition variations/embodiments are well within the scope of the present invention.

An example of a PSB result list display used in an embodiment of the present invention is shown in FIG. 7, which is a display of the first few entries resulting from a match request query from a seeker with the following criteria factors (characteristics):

Female+Age 37+\$50,000-\$74,999 Total Household Income+Minor Children in Household+California Resident+Enjoys Sports

As shown in FIG. 7, a single entry, such as entry 710a in a PSB result list consists of a description 720 preferably of a web site, preferably comprising a title and a short textual 45 description, and preferably a hyperlink 730 which, when clicked by a seeker, directs the seeker's browser preferably to the URL where the described web site is located. The URL 740 may also optionally be displayed in the PSB result list entry 710a, as shown in FIG. 7. The "click through" of a result list display 710 of FIG. 7 selects, or "clicks" on the hyperlink 730 of the PSB result list display 710. In order for a "click through" to be completed, the seeker's click should be recorded at the account management server and redirected to 55 the advertiser's URL via the redirect mechanism discussed above.

PSB result list entries 710a-710g may also show the rank value, 760a through 760g, of the advertiser's listing. The rank value is an ordinal value, preferably a number, generated and assigned to the PSB listing by the processing system 34 of FIG. 1. Preferably, the rank value is assigned through a process, implemented in software, that establishes an association between the bid amount, the rank, and the criteria of a PSB listing. The process gathers all advertiser listings having criteria sets wherein at least one criterion of each advertiser criteria set matches at least one criterion of the seeker; but

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only where the advertiser criteria sets DO NOT contain any criteria which does not match the criteria of the seeker (further explained below). Then it sorts the listings in order from highest to lowest bid amount, and assigns a rank value to each listing in order. The highest bid amount receives the highest rank value, the next highest bid amount receives the next highest rank value, proceeding to the lowest bid amount, which receives the lowest rank value. Most preferably, the highest rank value is 1 with successively increasing ordinal values (e.g., 2, 3, 4, . . .) assigned in order of successively decreasing rank. The correlation between rank value and bid amount is illustrated in FIG. 7, where each of the paid advertiser list entries 710a through 710d and 710f and 710g display the advertiser/providers' bid amounts 750a through 750d and 750f and 750g for that entry.

In a preferred embodiment, where seekers are required to complete the entire questionnaire as a condition of receiving a result list at all, the system and method of FIG. 1 implement result list placement logic which may, by way of example and not limitation, be summarized by the following rules:

- 1. You may at all times create and bid on any criteria (characteristics) set you desire; your set containing anywhere from as few as one criterion factor (e.g. just one or more of the 40,000+Zip Codes) up to and including all of our available criteria factors. You're always able to decide for yourself how best to target your products, services, and benefits to your customers/clients. You always control exactly who receives your offers, and, often just as important, who doesn't. (Don't even try getting this kind of pinpoint targeting and control from search engine marketing [SEM] or search engine optimization [SEO]—because you can't.)
- 2. Your listing/advertisement will be delivered/presented only to seekers meeting at least your complete criteria set; whether your set consists of one criterion . . . or 25.
- We will place you at the position you requested among others targeting the same exact criteria set at the lowest price possible.
- 4. There is at all times a minimum bid of \$1.00 per criteria set; regardless of the number of or type of criterion factors 40 chosen.
  - 5. Minimum bid increments are \$0.01.
  - 6. In order to maximize seekers attention to and interest in their result lists, unpaid listings may at system operator's sole discretion be placed anywhere before, after, or among the paid listings.
  - 7. If and when result lists are arranged/displayed in categories, a higher amount bid listing will always appear above a lower amount bid listing; regardless of the criteria set selected by each advertiser/provider for each of their respective listings. Ties under this particular scenario will be broken by date of listing; earliest on top, 2<sup>nd</sup> earliest 2<sup>nd</sup>, 3<sup>rd</sup> earliest 3<sup>rd</sup>, etc (referring here to positions among the tied listings; not to positions within the entire result list).
  - 8. Subject to any criteria bid caps you may have set, if there are ties between you and one or more other advertisers sharing the same exact criteria set that make your requested position unavailable, we will make your new bid \$0.01 more than the tie amount and you will be right on top of the ties. This means you might get a position higher than you requested.
  - 9. If your requested position cannot be obtained because your bid cap is too low, we will get you the best position for your bid cap. Often that means that your new bid will be equal to your bid cap, but if we can get that same position for a lower price, we will give you the lower price.
  - 10. You bid only against others also targeting your exact same criteria set. Your "Current Rank" and "Bid to Become #1" components are valid as between you and the other adver-

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tisers targeting this exact same criteria set [FIG. 9]. When seekers submit queries, your "current rank" and "bid to become number one" may not represent your listing's position within the result list presented to a given seeker. This is due to the required inclusion in the seeker's result list of any and all advertisers having one or more criterion factors in common with any of the seeker's criterion factors except when such advertiser criteria sets ALSO contain any criterion factors which contradict any of the seeker's criteria (this will be further explained below). Advertisers who's criteria set and both match in whole or in part seeker's criteria set AND which also includes additional criteria beyond seeker's, because in such cases the advertisers have indicated a desire for even greater specificity, are not displayed.

Though they could be the same occasionally; in the majority of the cases, your listing will normally differ from the "current rank" and "bid to become #1" numbers shown in your change bids selection screen(s) [FIG. 9]. There is no need, however, to be concerned about this phenomena. Remember that because you only pay when a targeted, prescreened seeker who in the very least meets ALL of your designated criteria and then actually clicks on your ad and visits your website, your exact position within any particular result list is far less important than is your position among the group of companies (potentially including some of your competitors) directly targeting the same exact people you are. That's where your position matters the most. That's where you'll want to "fight" for the best placement you can afford.

In addition, because in no case will bids of a lesser value appear above/ahead of bids of a greater value in ANY result 30 list provided to ANY seeker, as per our rules, no advertiser with a lower bid than you (which bid is, as stated, on their own criteria set) will ever appear above your listing in ANY result list. You invest more; you receive more. No matter what your position on individual result lists are. It's as simple as that. 35

11. All paid advertisers must have at least one criterion factor in common with seeker and no factors which are contradictory with any of seeker's criteria in order to appear on that seeker's result list. Each generated result list contains any and all advertiser/providers having at least one criterion factor in common with the seeker's criteria/data; where no criteria of any advertiser is a contradiction with any of seeker's criteria/data. This is how we insure that seekers receive ONLY listings (including yours!) which are relevant to each seeker (and to your website/offer/products/services/etc); and 45 none that aren't.

These rules are exemplary only. Other rules may be readily devised and applied, individually or in combination with each other, as well. For example, as stated, instead of being the preferred sole determining listing placement factor, a criteria 50 (characteristics) set bid may in other embodiments be just one of two or more factors used to determine placement within (a) result(s) list(s). By way of example and not limitation, such other result list placement factors could include an ads actual or projected popularity and/or click through rate (CTR), 55 popularity and/or importance and/or desirability of various criteria to the seeker(s) and/or advertiser(s) and/or system operator(s), relationship of an/the advertiser(s) and/or seeker to the system operator, advertiser cost of one or more of the criteria (i.e. where the inclusion of particular higher cost/ 60 higher value criteria results in even higher result list placement), seekers geographic location relative to one or more of the advertisers, credit standing of the advertisers (relative to each other and/or to some established standard, i.e., their DUNN & BRADSTREET or FICO scores), length of time 65 advertisers have been utilizing system, total money spent (i.e. over a specific time period and/or length of a contract) by

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advertisers, past match queries (i.e. frequency of, number/choices of ads/listings clicked on, time spent reviewing, number/types of ads/listings displayed), etc. Indeed, as can now be appreciated, the placement factors (weighted and/or unweighted)/rules possibilities may be virtually limitless.

Accordingly, no effort will be made here to attempt to list every possible set of weighted and/or unweighted factors and rules which may be implemented and utilized to determine advertiser/advertisement placement within seeker result lists. It is understood that numerous modifications and variations may be readily devised given the above and herein description of the principles of the invention. All such modifications and variations are well within the spirit and scope of this invention, as it is defined in the claims.

Also, though not preferred embodiments, result lists may contain only listings where, e.g., a minimum of one—or some/any other number of—criterion factors must match among/between the advertisers and/or the seekers (or where a certain number of particularly specified criteria factors must match up) in order to appear on a result list. Or, in still another embodiment, positional bidding could be conducted not exclusively between advertisers sharing the same criteria set; but instead be conducted between all advertisers who have one, two, three, four, etc; or at least one (or at least two, at least three, at least four, etc) criterion in common with each other, e.g., where each individual criterion an advertiser wanted to target could be bidded individually, then "algorithmically combined" (or combined in some other manner) to arrive at "current ranking" and "bid to become #1" figures.

Or, bidding could be conducted among all advertisers having at least a given advertiser's criteria factor set. Or, some "point value" methodology could be employed (with or without algorithms), where values are assigned to each criterion factor based on each factor's relative importance/value to the set of criteria as a whole or to some other existing and/or created benchmark (or even correlated to each [other] factor individually for value determination). In still another embodiment, the advertisers could be required to select some minimum number of criteria for their criteria set; and/or have some criteria cap on the number of criteria they may select. Or, their criteria set may be required to contain one or more particular rule-required criteria (i.e. one or more zip codes, an income range, familial size, marital status, etc). Indeed, as can now be appreciated, the competitive bidding possibilities may be virtually limitless.

Accordingly, no effort will be made here to attempt to list every possible set of bidding and other factors and rules which may be utilized to determine advertiser/advertisement placement within seeker result lists. It is understood that numerous modifications and variations may be readily devised given the above and herein description of the principles of the invention. All such modifications and variations are well within the spirit and scope of this invention, as it is defined in the claims.

Referring now again to FIG. 7, where the bid amounts among the paid advertisers are in monetarily ranked order; but not (excepting as between listings 710c and 710d) in "monetarily tight" sequential order. That is, though listed from highest bid to lowest based strictly on bid amounts as is the preferred embodiment, the actual amounts between each listings' bids are neither \$0.01 nor some other system-operator-required monetary distance apart. GM is in first position with a \$7.00 bid, yet, while Toys R Us is in 2<sup>nd</sup> position, their bid is not even \$6.80+. The differences between 750b and 750c, and between 750f and 750g, are greater still. This is what result lists will typically look like in a preferred embodiment of the present invention, where each advertiser simply bids only against other advertisers targeting the same exact

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criteria set as they are; not against other criteria sets, e.g., all advertisers sharing at least one common criterion but no conflicting criteria (which embodiment, while possible to implement, would be unwieldy, complicated and difficult to manage given the large number of variables involved). The advertisers chose their bid amounts based on what positions they desired for their own selected criteria set. Though irrelevant to the operation of the system; note that, over time, especially as the system's utilization expands beyond 100, 000+ advertiser/providers, these monetary variations between positions on result lists will generally narrow.

Let us now take a look at how, working from the previously detailed result list placement rules, the six paid listings of FIG. 7 may have come to be listed in the order depicted (establishing scenarios so as to determine exactly why they are listed so would limit the exploration of multiple aspects of the above rules and the present invention and is therefore not pertinent to our discussion here):

First; we know that all the listed advertisers have at least 20 one criterion factor in common with the seeker while having no criterion factors which conflict with/contradict those of the seeker. Accordingly, one or more of these advertisers' criteria sets could, for example, consist entirely of any one of seeker's criterion factors, e.g. just "females," just "age 37" (or "35-40" 25 etc), just "those with \$50,000-\$74,999 total household income," etc. Or two criterion factors, e.g. "female" + "35-40," "CA resident+enjoys sports," "female+enjoys sports," etc. Or three factors, etc; up to this seekers total of six criteria factors. In effect, each individual advertiser's criteria set may consist 30 of any number of, in any combination, of this seeker's total criteria set (or more, as explained below), as depicted, consisting of: Female, age 37, \$50,000-\$74,999 THI, minor children in household, CA resident, and enjoys sports.

Contradicting criteria (which negate the listing of otherwise qualified-to-be-listed-advertisers in a result list for a given seeker) are those criteria which, by their nature, eliminate or "cancel out" one or more of the unique demographic, geographic, and/or psychographic factors unique to each seeker. Contradicting criteria, in effect, render meaningless these unique criteria factors. Using our example seeker for illustration; contradicting criteria would include if the seeker were male, any age but age 37 (or any age range which does not include 37), had any total household income besides \$50,000-\$74,999, had no minor children in household, was a resident of any state other than California, and who dislikes sports.

This means that, even if an advertiser's criteria set included female, age 37, \$50 k-\$74,999 THI, and CA resident (5 of the seeker's 6 criteria); but which also included those women 50 who dislike sports; this advertiser's listing would not be included in this seeker's result list. "Dislikes Sports" contradicts "Likes Sports." The seeker probably doesn't want to see listings targeted to women like her but who don't like sports anyway; and in any case, this advertiser has already indicated 55 they want to reach only such women who do not like sports. They've already said, by their choice of criteria, that they want to target—and only pay for—those 37 year old women with \$50 k-\$74,999 THI having minor children in the household who live in California who dislike sports. Not those who 60 like sports. In a similar manner; an advertiser who is targeting age 37, CA resident, enjoys sports, Males would also not appear on this seeker's list, as a result of the contradicting criterion "Male." Nor would an advertiser appear whose set includes female, age 37, minor children in household, enjoys 65 sports; but where the household income is a contradicting \$75,000.

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Now, if any of these displayed advertisers' criteria sets had consisted of from one to six of this seeker's criteria factors plus one or more additional criterion factors (conflicting or not), under our operating rules, their listing would not have appeared; due to advertisers desire for greater specificity and/or different (though similar) targeting. Therefore, if one or more of the six paid advertisers' criteria sets had consisted of one or more from the set of: female, age 37, \$50 k-\$74,999 TRI, minor children in household, CA resident, and enjoys sports but also included, e.g. "was in the military," "enjoys reading," "enjoys horseback riding," "has asthma," "wants to buy a computer," "has a dog," etc, their listing would not have appeared. Because the advertiser(s) wouldn't be getting (all) what they were looking for in such a scenario, they don't have to (and wouldn't want to anyway) pay for a listing to be presented to this particular seeker.

Now specifically (looking again to FIG. 7); perhaps General Motors is targeting (and so their criteria set therefore consists of) just females. Or females who live in California. 37 year old females who enjoy sports. Females with minor children in the household. Maybe they're looking for 37 year old CA females with minor children. Or 37 year old CA residents who enjoy sports (note here that, by GM indicating their offer is for men OR women [by not making "females" one of their chosen criteria], their listing will appear for both women and men who live in CA, are 37 years old, and who like sports). In all these scenarios, GM would appear on the FIG. 7 seeker's result list. If, however, GM specified "Males" as part of any of these otherwise "qualified" criteria sets; because such criteria would then contradict seeker's, their listing would not appear for this female seeker.

In the event GM's criteria set included from one to all six of the same six criteria as this seeker plus one or more additional criteria, e.g. "Regularly uses their American Express Card," "Listens to Music," "Has a Dog" etc; because GM is more specific (and targeting differently if less than six of their criteria matches seeker) in its targeting than is seeker, seeker would not see this GM listing. GM wants in this case to be more targeted/specific than seeker is; making this seeker "ineligible" to know about GM's listing/offer. As this illustrates, in many cases it may be in the advertisers best interest to specify just the minimum number of targeting criteria as is truly consistent with their offer/listing/company in order to maximize the number of likely customers/clients for their products, services, and benefits. With this system's pinpoint targeting accuracy, it would be easy to get carried away by selecting more criteria than is really required; resulting in unnecessary lost business.

Why is GM in the first/top position in this seeker's list? Under our rules, it's not because they've bid the most to be so; but because GM has the highest bid amount of all the paid advertisers who qualified to be displayed to this particular seeker. What GM's top position additionally tells us is that they also hold the top position among those advertisers targeting the same (and therefore who are "competing" with GM) criteria set as GM is. This is so because, since GM's criteria set got them on this seeker's list, all other advertisers sharing the same set as GM must by logic and necessity also appear in this seeker's list, since, if GM "matches up" with this seeker, everyone sharing GM's criteria set also "matches up" with this seeker. What we can't tell from this list, though, is just what GM's criteria set is; as it could be any type and number of criteria which qualifies the seeker to view GM's listing under our rules. Such targeting secrecy (and click fraud reducing) is obviously very valuable and desirable to advertisers; and is another of the many unique features and benefits of the present invention.

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The remaining five paid advertisers of FIG. 7 are in the order they are, as with GM, only because of the bid amounts they are paying for whatever positions each of them have selected in competition with other advertisers targeting the exact same respective criteria set as each of these five are. 5 What we can discern, however (given that most seekers will have result lists totaling some 100+ listings once system has been in operation for a short while), is that all five hold very high places among their specific, respective criteria set in order to show up in the top six paid positions on this list. 10 Indeed, given the amazingly wide range of available criteria sets for advertisers to choose from, there is a good chance that each of these advertisers may actually hold the top position among all companies competing for each advertisers respective targeted criteria sets; just as we have determined GM is 15 with their criteria set. Additionally, each of these six advertisers (though they all have at least one non-contradictory criterion factor in common with the seeker), may have no criterion factors in common with each other.

For example, GM could be targeting just females with their 20 0% financing offer. Toys R Us, only 37 year olds (and so, males or females) for their offer. Amazon, just those with THI's of \$50,000-\$74,999 for theirs. 24 Hour Fitness, only CA residents. PCH, just those with minor children in the household. RealtyTruth.com, only those who enjoy sports. No criteria in common with each other; yet all would appear on this seeker's result list under the rules of this embodiment. All these advertisers able to reach their targets—and only their targets, no matter what criteria each advertiser selects. And with no one the wiser about what any of them are doing 30 or the markets they're each targeting. That's the profound versatility of the present invention.

Unpaid listing 710e is displayed among the paid listings. Preferably, such unpaid listings—especially those offering high-demand free or very low cost products, services, and 35 benefits such as is often the case with government programs and the like—may be interspersed among the paid listings. In this way, seekers remain highly motivated to review the complete list of all offered products, services, and benefits offered by all the advertisers. "Free" has proven itself over the years 40 to be one of the most powerful words in advertising/marketing. Interspersing such listings among the paid listings therefore puts "Free" to its best use; for the benefit of all; seekers, advertiser/providers, and the system operator/administrator. It is to be understood that the displayed PSB listings are in no 45 way limited to any particular type or number of listings.

In a preferred embodiment, hyperlink 770 of FIG. 7 provides seekers with the option to have their profile data saved by the system operator so they won't have to complete the questionnaire(s) again in order to generate the highly-desired 50 updated result lists in the future. Preferably, they are also given the option to receive automatically (or manually) generated result lists at regular time intervals of their (or optionally system operator's) choosing. Given the dynamic, constantly-changing (e.g., often time-sensitive and availability/ 55 supply limited) nature of both "everyday" as well as government product, service, and benefit offerings; when combined with the pinpoint targeting/matching of entities with the advertisers offerings as provided by the present invention, such entity-requested updated and accurate-to-the- 60 minute result lists will likely be desired no less than at least daily by these anxious-and curious-entities. Daily review and consideration of "who's offering me/us/my company/my city what; when; and for how long" will one day be as ubiguitous as the morning newspaper or cup of coffee. While such 65 data storage and automated updating methodologies are well know to the arts; the architecture for and procedures to imple32

ment this data storage and automated updating are not conventional in the bidded-position, pay-for-performance system of matching providers with seekers as detailed herein.

Though shown in FIG. 7 for clarity and explanatory purposes, the preferred embodiment is that the advertisers' bid amounts not be shown. Unlike as is the case with the Internet search field/industry, where questions have been regularly raised as to how the order of search results are determined (especially so in the early years of search); the current invention has no such editorial integrity issues. Seekers know what's "going on," what to expect, and what the match result lists are revealing to them. Other media doesn't display what advertisers have paid for their placements; it preferably shouldn't be done with the present invention, either.

Also preferably, if two PSB listings with the same criteria sets also have the same bid amount, the bid that was received earlier in time will be assigned the higher rank value. Alternatively, a minimum monetary bid increment "distance" (\$0.01, \$0.05, etc) between bids to eliminate ties from occurring may optionally be required.

It is to be understood that while presenting results lists to seekers whereby the paid advertisers are listed strictly in highest-to-lowest descending order based on their respective criteria-set bids is the preferred embodiment (and, as stated, optionally yet preferably with unpaid listings being interspersed among the paid listings); in an alternative embodiment, they may be listed and displayed in any order deemed suitable by the system operator, as long as the advertisers' bids are at least one of the factors in the determination of the order in which the advertisers appear in results lists.

In another embodiment, the PSB listings may be categorized and presented to the seeker in a "segmented-by-subjectmatter" manner, e.g., under one or more categories/classes and/or sub categories/sub classes such as "Housing," "Employment," "Education," "Vacation/Recreation," "Government," etc. In a preferred embodiment of this option (ideally, subject to editorial review in order to insure relevancy) the categories in which their PSB listings/offerings are to appear may be self-selected by the advertisers themselves (preferably via account management menu 170 of FIG. 2). Alternatively, the system administrator may itself categorize the listings in this or a related manner; manually or automatically. In the event such categorization is utilized, the preferred embodiment is that, to the greatest extent possible in order to maintain the relative "positional/monetary strength" of and between the advertisers, rankings and listing positions change no more than is necessary when instituting such categorization e.g., with the advertisers continuing to be listed in descending order; highest bid at the top, lowest at the bottom. Such categorization may make it easier for some entity PSB seekers to review the products, services, and benefits being offered to them by the providers/advertisers; particularly as, once launched, the inventions use continues its rapid expansion in the years to come. Alternatively, any and all other various types and forms of results ordering/positioning and presentation to seekers are also well within the scope of the present invention; including, as above, the option of having the listing order of the advertisers not be based solely on the advertisers' bid amounts.

As shown in the campaign management menu 170 of FIG. 2, several choices are presented to the advertiser to manage PSB criteria. First, in the "Change Bids" selection, the advertiser may change the bid of PSB criteria currently in the account. The process invoked by the system for the change bids function is shown in FIG. 8. After the advertiser indicates the intent to change bids by selecting the "Change Bids" menu option, the system searches the user's account in the

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database and displays the PSB criteria(s) for the entire account or a default subaccount in the advertiser's account, as shown in step 810. PSB criteria may be grouped into subaccounts defined by the advertiser and may comprise one or more PSB criteria. Only one subaccount may be displayed at a time. The display should also preferably permit the advertiser to change the subaccount selected, as shown in step 815. The screen display will then show the PSB criteria for the selected subaccount, as indicated in step 820.

An example of screen display shown to the advertiser in 10 step 810 is shown in FIG. 9 and will be discussed below. To change bids, the advertiser user may specify new bids for PSB criteria for which the advertiser already has an existing bid by entering a new bid amount into the new bid input field for the PSB criteria. The advertiser-entered bid changes are displayed to the advertiser at step 820 of FIG. 8 as discussed above. To update the bids for the display page, the advertiser requests, at step 830 of FIG. 8, to update the result of changes. The advertiser may transmit such a request to the account management server by a variety of means, including clicking 20 on a button graphic.

As shown in step **840** of FIG. **8**, upon receiving the request to update the advertiser's bids, the system calculates the new current bid amounts for every PSB criteria displayed, the rank values, and the bid amount needed to become, preferably, the 25 highest ranked PSB listing matching the PSB criteria field (optionally, the bid amount[s] needed to become the n<sup>th</sup> ranked PSB listing may [also] be provided to and selected by the advertiser e.g., 3<sup>rd</sup> highest, 5<sup>th</sup> highest, 10<sup>th</sup> highest, 25<sup>th</sup> highest, etc). Preferably, the system then presents a display of 30 changes at step **850**. After the user confirms the changes, the system updates the persistent state by writing the changes to the account in the database.

The PSB criteria data is displayed in tabular format, with each PSB criteria set corresponding to one row of the table 35 900. The PSB criteria 902 is displayed in the leftmost column, followed by the current bid amount 904, and the current rank 905 of the PSB criteria. The current rank is followed by a column entitled "Bid to become #1" 906, defined as the bid amount needed to become the highest ranked for the displayed PSB criteria set; and "New Bid" column 907. This rightmost column 907 of each row comprises one or more new bid input fields 908 which is set initially to the current bid amount.

As shown in FIG. 9, the PSB criteria listings may be dis- 45 played as "subaccounts." Each subaccount comprises one PSB criteria set/group, with multiple subaccounts residing within one advertiser account as needed. Each subaccount may be displayed on a separate display page having a separate page. The advertiser should preferably be able to change the 50 subaccount being displayed by manipulating a pull-down menu 910 on the display shown in FIG. 9. In addition, PSB criteria sets that cannot be displayed completely in one page may be separated into pages which may be individually viewed by manipulating pull-down menu 920. Again, the 55 advertiser should preferably be able to change the page displayed by clicking directly on a pull-down menu 920 located on the display page of FIG. 9. The advertiser may specify a new bid for a displayed PSB criteria set by entering a new bid amount into the new bid input field 908 for the PSB criteria 60 set. To update the result of the advertiser-entered changes, the advertiser clicks on button graphic 912 to transmit an update request to the account management server, which updates the bids as described above.

Many of the other selections listed in the "Account Management" menu 170 of FIG. 2 function as variants of the "Change Bid" function described above. For example, if the

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advertiser selects the "Change Rank Position" option, the advertiser may be presented with a display similar to the display of FIG. 9 used in the "Change Bid" function. However, in the "Change Rank Position" option, the "New Bid" field 907 would be replaced by a "New Rank" field, in which the advertiser enters the new desired rank position for a PSB criteria. After the advertiser requests that the ranks be updated, the system then calculates a new bid price by any of a variety of algorithms easily available to one skilled in the art. For example, the system may invoke a routine to locate the PSB criteria in the match engine database having the desired rank/PSB criteria combination, retrieve the associated bid amount of said combination, and then calculate a bid amount that is N cents higher; where N=1, for example. After the system calculates the new bid price and presents a read-only confirmation display to the advertiser, the system updates the bid prices and rank values upon receiving approval from the advertiser.

The "Modify Listing Component" selection on Account Management menu 170 of FIG. 2 may also generate a display similar to the format of FIG. 9. When the advertiser selects the "Modify Listing Component" option, the advertiser may input changes to the URL, title, or description of a PSB criteria via web-based forms set up for each PSB criteria. Similar to the process discussed above, the forms for the URL, title, and description fields may initially contain the old URL, title and description as default values. After the advertiser enters the desired changes, the advertiser may transmit arequest to the system to update the changes. The system then displays a read-only confirmation screen, and then writes the changes to the persistent state (e.g., the user account database) after the advertiser approves the changes.

A process similar to those discussed above may be implemented for changing any other peripheral options related to PSB listing; for example, changing the matching options related to bidded PSB criteria. Any recalculations of bids or ranks required by the changes may also be determined in a manner similar to the processes discussed above.

In the "Delete Bidded PSB Criteria Term" option, the system retrieves all of the PSB listings in the account of the advertiser and displays the PSB listings in an organization and a format similar to the display of FIG. 9. Each PSB criteria entry may include, instead of the new bid field, a check box for the advertiser to click on. The advertiser would then click to place a check (X) mark next to each PSB criteria to be deleted, although any other means known in the art for selecting one or more items from a list on a web page may be used. After the advertiser selects all the PSB criteria to be deleted and requests that the system update the changes, the system preferably presents a read-only confirmation of the requested changes, and updates the advertiser's account only after the advertiser approves the changes. The "deleted" PSB criteria is/are removed from the match engine database 36 and will not appear in subsequent match requests. However, the PSB criteria will remain as part of the advertiser's account record for billing and account activity monitoring purposes.

In the "Add Bidded PSB Criteria" option, the system provides the advertiser with a display having a number of entry fields corresponding to the elements of PSB criteria. The advertiser then enters into each field information corresponding to the respective PSB listing element, including the PSB criteria, the web site URL, the web site title, the web site description, and the bid amount, as well as any other relevant information. After the advertiser has completed entering the data and has indicated thus to the system, the system returns a read-only confirmation screen to the advertiser. The system then creates a new PSB listing instance and writes it into the

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account database and the match engine database upon receiving approval from the advertiser.

Preferably, the "Account Management" menu 170 of FIG. 2 provides a selection for the advertiser to "Get Suggestions On Bidded PSB Criteria". In this case, the advertiser enters (a) bidded PSB criteria into a form-driven query box (or other known means for selecting one or more from a given set of choices) displayed to the advertiser. The system reads the PSB criteria entered by the advertiser and generates a list of additional related PSB criteria to assist the advertiser in locating criteria relevant to the content of the advertiser's web site and/or offerings. Preferably, the additional criteria are generated using methods such as a string matching algorithm applied to a database of bidded criteria and/or a thesaurus database implemented in software. The advertiser may select 15 criteria to bid on from the list generated by the system. In that case, the system displays to the advertisers the entry fields described above for the "Add Bidded PSB Criteria" selection, with a form for entering a PSB listing for each criterion/ criteria (set) selected. Preferably, the selected criteria is 20 inserted as a default value into the form for each PSB listing. Default values for the other PSB listing components may also be inserted into the forms if desired.

The "Account Management" menu 170 of FIG. 2 also preferably provides advertisers with a "Project Expenses" 25 selection. In this selection, the advertiser specifies a PSB listing or subaccount for which the advertiser would like to predict a "daily run rate" and "days remaining to expiration." The system calculates the projections based on a cost projection algorithm, and displays the predictions to the advertiser 30 on a read-only screen. The predictions may be calculated using a number of different algorithms known in the art. However, since the cost of a PSB listing is calculated by multiplying the bid amount by the total number of clicks received by the PSB listing at that bid amount during a speci- 35 fied time period, every cost projection algorithm must generally determine an estimated number of clicks per month (or other specified time period) for a PSB listing. The clicks on a PSB listing may be tracked via implementation of a software counting mechanism as is well known in the art. Clicks for all 40 PSB listings may be tracked over time, this data may be used to generate estimated numbers of clicks per month overall, and for individual PSB criteria. For a particular criteria, an estimated number of match requests per day is determined and is multiplied by the cost of a click. This product is then 45 multiplied by a ratio of the average number of clicks over the average number of impressions for the rank of the PSB listing in question to obtain a daily run rate. The current balance may be divided by the daily run rate to obtain a projected number of days to exhaustion or "expiration" of account funds.

One embodiment of the present invention bases the cost projection algorithm on a simple predictor model that assumes that every PSB criteria performs in a similar fashion. This model assumes that the rank of the advertiser's PSB listing will remain constant and not fluctuate throughout the 55 month. This algorithm has the advantages of being simple to implement and fast to calculate. The predictor model is based on the fact that the click through rate, e.g. the total number of clicks, or referrals, for a particular PSB listing, is considered to be a function of the rank of the PSB listing. The model 60 therefore assumes that the usage curve of each PSB criteria, that is, the curve that results when the number of clicks on a PSB listing is plotted against the rank of the PSB listing, is similar to the usage curve for all PSB criteria. Thus, known values extrapolated over time for the sum of all clicks for all 65 criteria, the sum of all clicks at a given rank for all criteria, and the sum of all clicks for the selected criteria may be employed

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in a simple proportion to determine the total of all clicks for the given rank for the selected criteria. The estimated daily total of all clicks for the selected criteria at the selected rank is then multiplied by the advertiser's current bid amount for the criteria at that rank to determine a daily expense projection. In addition, if particular criteria or classes of criteria are known to differ markedly from the general pattern, correction values specific to the criteria, advertiser, or other parameter may be introduced to fine-tune the projected cost estimate.

Finally, the "Account Management" menu 170 of FIG. 2 provides several selections to view information related to the advertiser's campaigns. The "View Subaccount Information" selection displays read-only information related to the selected subaccount. The "View PSB Criteria List" selection displays the list of the advertiser's selected criteria along with the corresponding URLs, bid price, and rank, with the criteria preferably grouped by subaccount. The advertiser may also view current top bids for a set of criteria selected from a list of criteria from a read-only display generated by the system upon receiving the requested criteria from the advertiser.

For an advertiser who requires a more comprehensive report of PSB listing activity, the "View Report" option may be selected from the Advertiser Main Page 120 of FIG. 2. In an embodiment of the present invention, the "View Report" options generate reports comprehensive for up to one year preceding the current date. For example, daily reports are available for the each of the immediately preceding 7 days, weekly reports for the preceding four weeks, monthly reports for the preceding twelve months, and quarterly reports for the last four quarters. Additional reports may also be made available depending on advertiser interest.

Other predefined report types may include activity tracked during the following time periods: Since Inception of the Account, Year To Date, Yearly, Quarter To Date, Month To Date, and Week to Date. Report Categories may include a Detail Report, viewable by Advertiser Account, by PSB Criteria, and by URL, and a Summary Report, viewable by Advertiser Account and by Subaccount. The reports may include identification data such as advertiser account and subaccount name, the dates covered by the report and the type of report. In addition, the reports may include key PSB listing account data such as current balance, pending current balance, average daily account debit, and run rate.

Furthermore, the reports may also include key data, such as: PSB criteria, URLs, bids, current ranks, and number of clicks, number of match requests done for the PSB criteria, number of impressions (times that the PSB listing appeared in a PSB match result list), and click through rate (defined as Number of Clicks/Number of Impressions). Preferably, the report is available in at least HTML view options for viewing via a browser program, printing, or downloading. Note, however, that other view options may be made available, such as Adobe Acrobat, PostScript, ASCII text, spreadsheet interchange formats (e.g., CSV, tab-delimited), and other well-known formats.

When the advertiser has selected the "View Report" option, the system invokes a function which displays a list of available report types, dates, categories, and view options. The system preferably creates a report instance with the following fields, all of which are initially set to null: report type, report date, report category, and view option. Once the advertiser has defined the parameters described above, the system invokes a function to generate the requested report, based on the advertiser-set parameters, and to display the report, based on the view option parameter.

Finally, a preferred embodiment of the present invention implements an option for context specific help that the adver-

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tiser may request at any time the advertiser is logged in. The help option may be implemented as a small icon or button located on the system generated display page. The advertiser may click on the icon or button graphic on the display page to request help, upon which the system generates and displays a help page keyed to the function of the particular display the user is viewing. The help may be implemented as separate display pages, a searchable index, dialog boxes, or by any other methods well known in the art.

Given the above description of an overall approach to the Match Engine Marketing (Paid Match) service of the present invention, specific non-claim-limiting examples of different criteria (characteristics) bid sets by various potential advertiser/providers will now be described:

#### Example I

General Motors decides to test a special financing program ONLY to everyone who currently owns a non-GM automobile AND who lives in Florida AND who has minor children at home AND who is 18-49 years old AND lives within 20 miles of one of their Florida dealerships. This criteria set costs them only \$7 for the top position, for each of their clicks/referrals; a bargain considering their average lead cost for their dealer network runs almost \$80. Because they were able to pinpoint target their offer in this way, the millions of other existing (and potential) GM customers weren't upset that they weren't offered the same special financing this group was. As a result of how other marketing/media options operate, until now, this "non-targeted market awareness" and resultant anger and disappointment was often a big headache for GM. Not anymore.

#### Example II

Sees Candy geographically pin-point offers a buy-one-getone-free coupon only to people living in those four zip codes closest to each of their 432 stores AND who haven't bought Sees candy in the last 12 months. They pay just \$3.55 (for criteria set position number five) for each click/lead. Since only two boxes of candy pays for both the lead and the coupon; given the excellent repeat and word-of-mouth sales new customers generate, this is the most affordable advertising they've ever done.

#### Example III

Publisher's Clearing House is looking for a new way to bring in subscribers for their 100+ magazine and product suppliers and decides to use the system for an AB split test; 50 something they're well familiar with. To do so, they divide up the 40,000 national zip codes in half (on an "every other one" basis to insure result accuracy), making two different offers to each of the two sets of recipients. Paying only \$2.68 (list position #13) per click/lead, they discover to their amazement 55 that their ROI is almost three times that of direct mail.

#### Example IV

Amazon.com decides to take their 25 top selling \$50-\$200 60 non-book products and tailor a criteria set unique to each product, based on the profile of those most likely to have bought each product in the past. The results? Paying just \$3.10/click/lead for a positional average of five over all the products; their national advertising cost of sale is running 65 44-76% (depending on product) less than any other media they've ever used before.

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Example V

Tiffany has designed an exclusive new line of high-end (\$25,000+/piece) jewelry they want to sell over the Internet and by phone to those not living within driving distance of one of their stores; yet are tired of all the logistical difficulties of placing ads in overpriced, multi-month lead times, hard-tomeasure-results, hit-or-miss magazines. Instead, they pay only \$9.72 for the #1 spot with the following criteria: Household income of \$100,000+ AND have high-speed Internet access at home or work AND already own at least \$50,000 in jewelry AND have a net worth of at least \$500,000 excluding their principle residence. The result? Though it's early in the campaign, their cost of sale is averaging less than a third of what they usually spend-just \$3,500 per piece. While this amount may sound high, given that these pieces average a whopping 100% markup (as is common in the industry), it's actually almost like printing money.

#### Example VI

A small, local company, Wonderful Weddings, only provides their services to those in the Thousand Oaks, Westlake Village, and Agoura areas. Accordingly, they select the following criteria: Zip Codes 91359, 91360, 91361, 91362, and 91301+Females (men rarely make wedding decisions, so why pay to reach them?)+Getting married within the next six months (how many newspaper readers does this attribute ever apply to?). Since they average \$15,000 in products and services sold per wedding, they're only too happy to be paying \$2.97/click/lead (criteria set position 7) to reach only their target market.

#### Example VII

AT&T is launching an exciting new DSL service to the business community and wants to move quickly before their tough competitors get wind of it. As a test, they initially target every 10th zip code (an Nth sort); giving them 4000 zip codes worth of businesses at a B2B cost of just \$8.32 per click/lead (since they want to reach all businesses regardless of employee count, revenue, facilities location(s), industry sector, products/services offered, etc, they've decided to not use any other firmographic criteria on this offer). This buys them the top position. They realize within the first 15 days that this new (avg. \$1,000+/year/business) service is their biggest winner yet, and so immediately roll their offer out to all 40,000 US zip codes; now paying \$8.57 per click/lead. By the time their competitors get hold of the offer and try to come up with something to counter AT&T, it's already too late. SBC, Verizon, Southwest Bell, and the rest never knew what hit

As these are just a few examples of the virtually limitless use possibilities for the present invention, it is to be understood that these Examples are of course not intended to, and should accordingly not be used to, either limit the scope of the claims or to limit the invention to either any particular embodiment(s) or to (a) precise form(s).

### CONCLUSION

While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiment, it is to be understood that the invention is not to be limited to the disclosed embodiment. This description is not intended to be exhaustive or to limit the invention to the precise form disclosed.

As should now be readily apparent, the unobvious and unexpected, superior results present invention clearly and convincingly takes the matching of advertisers with their entity targets to a whole new and exciting, powerfully effective, highly profitable and premier level by providing the 5 world's first and only real or substantially real time pay for performance characteristics-targeted marketing vehicle. As the ground-breaking GoTo patent (U.S. Pat. No. 6,269,361) did for its new "paid search" industry; the present invention is itself the foundational force set to lead the way to another 10 exciting new national and international industry. Welcome to the birth of revolutionary new frictionless advertising, to be heretofore known as Match Engine Marketing<sup>TM</sup>/Paid Match<sup>TM</sup>.

The many features and advantages of the groundbreaking 15 present invention are apparent from the detailed, clarity-andunderstanding-providing specification. Furthermore, since numerous modifications, variations, changes, and alterations will readily occur to those skilled in the arts once this invention is known to the arts, it is not desired that the present 20 invention be limited to the exact constructions, operations, and implementations illustrated and described herein; and accordingly, all suitable modifications, variations, and equivalents which may be resorted to are intended to fall within the true spirit, concept, and scope of the invention and 25 criteria is expressed as a numeric range. its claims and their legal equivalents; including where any bidding on, and/or payment(s) based on, entity criteria/characteristics is resorted to.

What is claimed is:

- 1. A method comprising:
- receiving through a network from a first device connected to the network information associating one or more demographic and/or psychographic and/or firmographic criteria with an ad;
- receiving through the network from the first device or a second device connected to the network a bid associated with the criteria:
- determining, by at least one processor, ad placement based at least in part on (i) the bid and (ii) ad performance 40 and/or ad popularity.
- 2. The method of claim 1 wherein ad performance and/or ad popularity takes into account one or more from the group consisting of: actual popularity, projected popularity, click through rate (CTR), frequency of ads clicked on, number/ 45 choices of ads clicked on, time spent reviewing, and number/ types of ads displayed.
- 3. The method of claim 1 wherein determining ad placement further comprises determining ad placement based at least in part on the geographic location of an entity.
- 4. The method of claim 1 wherein determining ad placement further comprises determining ad placement based at least in part on the geographic location of an entity relative to one or more advertisers.
- 5. The method of claim 1 further comprising displaying a 55 bid amount that would improve ad placement.
- 6. The method of claim 1 further comprising displaying an estimate of the projected cost of the ad.
- 7. The method of claim 1 wherein the criteria includes demographic criteria but not psychographic or firmographic 60
- 8. The method of claim 1 wherein the criteria includes psychographic criteria but not demographic or firmographic
- 9. The method of claim 1 wherein the criteria includes 65 firmographic criteria but not demographic or psychographic criteria.

- 10. The method of claim 1 wherein the criteria includes demographic and psychographic criteria.
- 11. The method of claim 1 wherein one or more ad placement factors is weighted.
- 12. The method of claim 1 further comprising delivering the ad to a wireless device.
- 13. The method of claim 1 wherein the ad is a video and/or
- 14. The method of claim 1 further comprising specifying a minimum acceptable bid amount and/or minimum acceptable bid increment.
- 15. The method of claim 1 further comprising requiring a minimum number of and/or particular demographic and/or psychographic and/or firmographic criteria.
- 16. The method of claim 1 wherein the criteria is one or more from the group consisting of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/ branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.
- 17. The method of claim 1 wherein at least one of the
- 18. The method of claim 1 further comprising tracking activity and/or tracking performance.
- 19. The method of claim 1 further comprising providing through the network to the first device or to the second device 30 or to a third device connected to the network one or more from the group consisting of: number of ad impressions, number of ad click throughs, click through rate (CTR), rank, top bid, current balance, pending current balance, average daily account debit, run rate, and projected number of days to account funds exhaustion.
  - 20. The method of claim 1 further comprising displaying the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which exactly matches the demographic and/or psychographic and/or firmographic criteria associated with said ad.
  - 21. The method of claim 1 further comprising displaying the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which does not exactly match the demographic and/or psychographic and/or firmographic criteria associated with said ad.
  - 22. The method of claim 20 or 21 wherein at least one entity criteria is sourced from one or more of the group consisting of: a questionnaire, survey, profile, query box/field, and criteria query page.
  - 23. The method of claim 20 or 21 further comprising storing one or more entity criteria.
  - 24. The method of claim 1 further comprising receiving through the network from the first device or the second device or a third device connected to the network information associating geographic criteria with the ad.
  - 25. The method of claim 1 further comprising enabling or setting one or more advertiser notifications.
  - 26. The method of claim 1 further comprising sending or receiving one or more advertiser notifications.
  - 27. The method of claim 1 further comprising one or more actions automatically taken as a result of one or more advertiser notifications.
  - 28. The method of claim 1 further comprising dropping the ad once a particular number of clicks on the ad have occurred.
  - 29. The method of claim 1 further comprising displaying the ad only during a certain time of day.
    - 30. The method of claim 1 wherein the bid is a variable bid.

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- 31. The method of claim 1 wherein the bid is a variable bid with a bid cap.
- 32. The method of claim 1 further comprising receiving an amount for the ad that is less than the amount bid for the ad.
  - 33. A system comprising:
  - a server connected to a network and configured to receive through the network (i) information associating one or more demographic and/or psychographic and/or firmographic criteria with an ad, and (ii) a bid associated with the criteria:
  - a processor coupled to the server configured to determine ad placement based at least in part on (i) the bid and (ii) ad performance and/or ad popularity.
- 34. The system of claim 33 wherein ad performance and/or ad popularity takes into account one or more from the group consisting of: actual popularity, projected popularity, click through rate (CTR), frequency of ads clicked on, number/choices of ads clicked on, time spent reviewing, and number/types of ads displayed.
- 35. The system of claim 33 wherein the processor is further configured to determine ad placement based at least in part on the geographic location of an entity.
- 36. The system of claim 33, wherein the processor is further configured to determine ad placement based at least in 25 part on the geographic location of an entity relative to one or more advertisers.
- 37. The system of claim 33 wherein the server is further configured to cause the display of a bid amount that would improve ad placement on a device connected to the network.
- 38. The system of claim 33 wherein the server is further configured to cause the display of an estimate of the projected cost of the ad on a device connected to the network.
- 39. The system of claim 33 wherein the criteria includes demographic criteria but not psychographic or firmographic 35 criteria.
- 40. The system of claim 33 wherein the criteria includes psychographic criteria but not demographic or firmographic criteria.
- 41. The system of claim 33 wherein the criteria includes 40 firmographic criteria but not demographic or psychographic criteria.
- 42. The system of claim 33 wherein the criteria includes demographic and psychographic criteria.
- 43. The system of claim 33 wherein the processor is further 45 configured to weight one or more ad placement factors.
- 44. The system of claim 33 wherein the server is further configured to deliver the ad to a wireless device.
- 45. The system of claim 33 wherein the ad is a video and/or
- audio ad.

  46. The system of claim 33 wherein the server is further
- 46. The system of claim 33 wherein the server is further configured to cause the display of a minimum acceptable bid amount and/or minimum acceptable bid increment on a device connected to the network.
- 47. The system of claim 33 wherein the processor is further 55 configured to require a minimum number of and/or particular demographic and/or psychographic and/or firmographic criteria.
- 48. The system of claim 33 wherein the criteria is one or more from the group consisting of: age, gender, income, 60 marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, 65 losses, market share, legal structure, student count, student composition, college degrees offered, population.

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- 49. The system of claim 33 wherein at least one of the criteria is expressed as a numeric range.
- 50. The system of claim 33 wherein the processor is further configured to track activity and/or track performance.
- 51. The system of claim 33 wherein the server is further configured to cause the display of one or more from the group consisting of number of ad impressions, number of ad click throughs, click through rate (CTR), rank, top bid, current balance, pending current balance, average daily account debit, run rate, and projected number of days to account funds exhaustion.
- 52. The system of claim 33 wherein the server is further configured to cause the display of the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which exactly matches the demographic and/ or psychographic and/or firmographic criteria associated with said ad.
- 53. The system of claim 33 wherein the server is further 20 configured to cause the display of the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which does not exactly match the demographic and/or psychographic and/or firmographic criteria associated with said ad.
  - 54. The system of claim 52 or 53 wherein at least one demographic and/or psychographic and/or firmographic criteria associated with the entity is sourced from one or more of the group consisting of: a questionnaire, survey, profile, query box/field, and criteria query page.
  - 55. The system of claim 52 or 53 further comprising storage for storing one or more demographic and/or psychographic and/or firmographic criteria of the entity.
  - 56. The system of claim 33 wherein the server is further configured to receive through the network information associating geographic criteria with the ad.
  - 57. The system of claim 33 wherein the processor is further configured to enable an advertiser to set one or more advertiser notifications.
  - 58. The system of claim 57 wherein the processor is further configured to send and/or receive one or more of the advertiser notifications.
  - 59. The system of claim 58 wherein the processor is further configured to automatically take one or more actions as a result of the advertiser notification(s).
  - 60. The system of claim 33 wherein the processor is further configured to drop the ad once a particular number of clicks on the ad have occurred.
  - 61. The system of claim 33 wherein the processor is further configured to display the ad only during a certain time of day.
  - 62. The system of claim 33 wherein the bid is a variable bid.
  - 63. The system of claim 33 wherein the bid is a variable bid with a bid cap.
  - **64.** The system of claim **33** wherein the processor is further configured to enable the receiving or paying of an amount for the ad which is less than the amount bid for the ad.
  - 65. A computer readable medium containing program instructions, wherein execution of the program instructions by one or more processors of a computer system coupled to a network causes the one or more processors to carry out the steps of:
    - receiving through the network from a first device connected to the network information associating one or more demographic and/or psychographic and/or firmographic criteria with an ad;
  - receiving through the network from the first device or a second device connected to the network a bid associated with the criteria;

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determining ad placement based at least in part on (i) the bid and (ii) ad performance and/or ad popularity.

- 66. The computer readable medium of claim 65 wherein ad performance and/or ad popularity takes into account one or more from the group consisting of: actual popularity, projected popularity, click through rate (CTR), frequency of ads clicked on, number/choices of ads clicked on, time spent reviewing, and number/types of ads displayed.
- 67. The computer readable medium of claim 65 wherein determining ad placement further comprises determining ad placement based at least in part on the geographic location of an entity.
- 68. The computer readable medium of claim 65 wherein determining ad placement further comprises determining ad placement based at least in part on the geographic location of an entity relative to one or more advertisers.
- 69. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of displaying a bid 20 amount that would improve ad placement.
- 70. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of displaying an estimate of the projected cost of the ad.
- 71. The computer readable medium of claim 65 wherein the criteria includes demographic criteria but not psychographic or firmographic criteria.
- 72. The computer readable medium of claim 65 wherein the criteria includes psychographic criteria but not demographic or firmographic criteria.
- 73. The computer readable medium of claim 65 wherein the criteria includes firmographic criteria but not demographic or psychographic criteria.
- 74. The computer readable medium of claim 65 wherein the criteria includes demographic and psychographic criteria.
- 75. The computer readable medium of claim 65 wherein one or more ad placement factors is weighted.
- 76. The computer readable medium of claim 65 wherein  $_{40}$  execution of the program instructions further causes the one or more processors to carry out the step of delivering the ad to a wireless device.
- 77. The computer readable medium of claim 65 wherein the ad is a video and/or audio ad.
- 78. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of specifying a minimum acceptable bid amount and/or minimum acceptable bid increment.
- 79. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of requiring a minimum number of and/or particular demographic and/or psychographic and/or firmographic criteria.
- 80. The computer readable medium of claim 65 wherein the criteria is one or more from the group consisting of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population.
- 81. The computer readable medium of claim 65 wherein at least one of the criteria is expressed as a numeric range.

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- 82. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of tracking activity and/or tracking performance.
- 83. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of providing one or more from the group consisting of: number of ad impressions, number of ad click throughs, click through rate (CTR), rank, top bid, current balance, pending current balance, average daily account debit, run rate, and projected number of days to account funds exhaustion.
- 84. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of displaying the ad to an entity having associated demographic and/or psychographic and/or firmographic criteria which exactly matches the demographic and/or psychographic and/or firmographic criteria associated with said ad.
- 85. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of displaying the ad to an entity having associated demographic and/or psychographic and/or firmographic criteria which does not exactly match the demographic and/or psychographic and/or firmographic criteria associated with said ad.
- 86. The computer readable medium of claim 84 or 85 wherein at least one criteria associated with the entity is sourced from one or more of the group consisting of: a questionnaire, survey, profile, query box/field, and criteria query page.
- 87. The computer readable medium of claim 84 or 85 wherein execution of the program instructions further causes the one or more processors to carry out the step of storing one or more criteria associated with the entity.
- 88. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of receiving through the network from the first device or the second device or a third device connected to the network information associating one or more geographic criteria with the ad.
- 89. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of enabling or setting one or more advertiser notifications.
- 90. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of sending and/or receiving one or more advertiser notifications.
  - 91. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of automatically taking one or more actions as a result of advertiser notification(s).
  - 92. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of dropping the ad once a particular number of clicks on the ad have occurred.
  - 93. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of displaying the ad only during a certain time of day.
- 94. The computer readable medium of claim 65 wherein the bid is a variable bid.
- 95. The computer readable medium of claim 65 wherein the bid is a variable bid with a bid cap.

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96. The computer readable medium of claim 65 wherein execution of the program instructions further causes the one or more processors to carry out the step of receiving and/or paying an amount for the ad which is less than the amount bid for the ad.

97. A method comprising:

auctioning or bidding on or for, through a network via at least one device connected to the network, a(n): ad, entity, user, seeker, or entity criteria;

determining, by at least one processor, ad placement;

- wherein one or more demographic and/or psychographic and/or firmographic criteria is associated with, a component of, a factor applicable to, or which corresponds to said ad, entity, user, seeker, or entity criteria.
- 98. The method of claim 97 wherein a bid is one of two or 15 more ad placement factors.
- 99. The method of claim 97 wherein a bid is one of two or more ad placement factors; the ad placement factor(s) in addition to the bid being one or more from the group consisting of: the ad's actual or projected popularity and/or click through rate (CTR); popularity and/or importance and/or desirability of various criteria to an entity, user, seeker and/or an advertiser and/or system operator(s); relationship of the advertiser and/or entity, user, seeker to the system operator; advertiser cost of one or more of the criteria; credit standing of the advertiser; length of time advertiser has been utilizing system; total money spent by advertiser; past match queries.
- 100. The method of claim 97 or 98 further comprising determining ad placement based at least in part on the geographic location of an entity.
- 101. The method of claim 97 or 98 further comprising determining ad placement based at least in part on the geographic location of an entity relative to one or more advertisers.
- 102. The method of claim 97 or 98 further comprising 35 displaying a bid amount that would improve ad placement.
- 103. The method of claim 97 or 98 further comprising displaying an estimate of the projected cost of the ad.
- 104. The method of claim 97 or 98 wherein the criteria includes demographic criteria but not psychographic or fir- 40 mographic criteria.
- 105. The method of claim 97 or 98 wherein the criteria includes psychographic criteria but not demographic or firmographic criteria.
- 106. The method of claim 97 or 98 wherein the criteria 45 includes firmographic criteria but not demographic or psychographic criteria.
- 107. The method of claim 97 or 98 wherein the criteria includes demographic and psychographic criteria.
- 108. The method of claim 98 or 99 wherein one or more of 50 have occurred. the ad placement factors is weighted. 126. The m
- 109. The method of claim 97 or 98 further comprising delivering the ad to, or receiving the ad on, a wireless device.
- 110. The method of claim 97 or 98 wherein the ad is a video and/or audio ad.
- 111. The method of claim 97 or 98 further comprising specifying a minimum acceptable bid amount and/or minimum acceptable bid increment.
- 112. The method of claim 97 or 98 further comprising requiring a minimum number of and/or particular demo- 60 graphic and/or psychographic and/or firmographic criteria.
- 113. The method of claim 97 or 98 wherein the criteria is one or more from the group consisting of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or 65 medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of

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locations/branches, sales volume, size, time length in business, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

- 114. The method of claim 97 or 98 wherein at least one of the criteria is expressed as a numeric range.
- 115. The method of claim 97 or 98 further comprising tracking activity and/or tracking performance.
- 116. The method of claim 97 or 98 further comprising providing through the network to one or more devices connected to the network one or more from the group consisting of: number of ad impressions, number of ad click throughs, click through rate (CTR), rank, top bid, current balance, pending current balance, average daily account debit, run rate, and projected number of days to account funds exhaustion.
- 117. The method of claim 97 or 98 further comprising displaying the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which exactly matches the demographic and/or psychographic and/or firmographic criteria associated with, a component of, a factor applicable to, or which corresponds to the ad.
- 118. The method of claim 97 or 98 further comprising displaying the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which does not exactly match the demographic and/or psychographic and/or firmographic criteria associated with, a component of, a factor applicable to, or which corresponds to the ad.
- 119. The method of claim 97 or 98 further comprising sourcing at least one entity criteria from one or more of the group consisting of: a questionnaire, survey, profile, query box/field, and criteria query page.
- 120. The method of claim 97 or 98 further comprising storing one or more entity criteria.
- 121. The method of claim 97 or 98 wherein one or more geographic criteria is associated with, a component of, a factor applicable to, or which corresponds to said ad, entity, user, seeker, or entity criteria.
- 122. The method of claim 97 or 98 further comprising enabling or setting one or more advertiser notifications.
- 123. The method of claim 97 or 98 further comprising sending or receiving one or more advertiser notifications.
- 124. The method of claim 97 or 98 further comprising one or more actions automatically taken as a result of one or more advertiser notifications.
- 125. The method of claim 97 or 98 further comprising dropping the ad once a particular number of clicks on the ad have occurred.
- 126. The method of claim 97 or 98 further comprising displaying the ad only during a certain time of day.
- 127. The method of claim 97 or 98 wherein the bid is a variable bid.
- 128. The method of claim 97 or 98 wherein the bid is a variable bid with a bid cap.
- 129. The method of claim 97 or 98 further comprising receiving or paying an amount for an ad which is less than the amount bid for the ad.
  - 130. A system comprising:
  - at least one server connected to a network and configured to receive through the network (i) one or more demographic and/or psychographic and/or firmographic criteria associated with, a component of, a factor applicable to, or which corresponds to an ad, entity, user, seeker, or entity criteria, and (ii) a bid on or for said ad, entity, user, seeker, or entity criteria;

at least one processor coupled to the server(s) configured to determine ad placement based at least in part on the bid.

- 131. The system of claim 130 wherein the server(s) and/or processor(s) is/are further configured to determine ad placement based on two or more ad placement factors.
- 132. The system of claim 130 wherein the server(s) and/or processor(s) is/are further configured to determine ad placement based on two or more ad placement factors; wherein the bid is one of the said factors; with the additional ad placement factor(s) being one or more from the group consisting of: the ad's actual or projected popularity and/or click through rate (CTR); popularity and/or importance and/or desirability of various criteria to an entity, user, seeker and/or an advertiser and/or system operator(s); relationship of the advertiser and/or entity, user, seeker to the system operator, advertiser cost of one or more of the criteria; credit standing of the advertiser, length of time advertiser has been utilizing system; total money spent by advertiser, past match queries.
- 133. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to determine ad placement based at least in part on the geographic location of 20 an entity.
- 134. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to determine ad placement based at least in part on the geographic location of an entity relative to one or more advertisers.
- 135. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to cause the display of a bid amount that would improve ad placement on a device connected to the network.
- 136. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to cause the display of an estimate of the projected cost of the ad on a device connected to the network.
- 137. The system of claim 130 or 131 wherein the criteria includes demographic criteria but not psychographic or firmographic criteria.
- 138. The system of claim 130 or 131 wherein the criteria includes psychographic criteria but not demographic or firmographic criteria.
- 139. The system of claim 130 or 131 wherein the criteria includes firmographic criteria but not demographic or psychographic criteria.
- 140. The system of claim 130 or 131 wherein the criteria includes demographic and psychographic criteria.
- 141. The system of claim 131 or 132 wherein the server(s) and/or processor(s) is/are further configured to weight one or 45 more of the ad placement factors.
- 142. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to deliver the ad to a wireless device.
- 143. The system of claim 130 or 131 wherein the ad is a video and/or audio ad.
- 144. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to cause the display of a minimum acceptable bid amount and/or minimum acceptable bid increment on a device connected to the network.
- 145. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to require a minimum number of and/or particular demographic and/or psychographic and/or firmographic criteria.
- 146. The system of claim 130 or 131 wherein the criteria is 60 one or more from the group consisting of: age, gender, income, marital status, occupation, familial size, familial composition, education, housing status, one or more health or medical conditions or diseases, one or more hobbies, employee count, industry type/category, revenue, number of locations/branches, sales volume, size, time length in busi-

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ness, profits, losses, market share, legal structure, student count, student composition, college degrees offered, population

- 147. The system of claim 130 or 131 wherein at least one of the criteria is expressed as a numeric range.
- 148. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to track activity and/or track performance.
- 149. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to cause the display of one or more from the group consisting of number of ad impressions, number of ad click throughs, click through rate (CTR), rank, top bid, current balance, pending current balance, average daily account debit, run rate, and projected number of days to account funds exhaustion.
- 150. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to cause the display of the ad to an entity with associated demographic and/or psychographic and/or firmographic oriteria which exactly matches the demographic and/or psychographic and/or firmographic criteria associated with, a component of, a factor applicable to, or which corresponds to the ad.
- 151. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to cause the display of the ad to an entity with associated demographic and/or psychographic and/or firmographic criteria which does not exactly match the demographic and/or psychographic and/or firmographic criteria associated with, a component of, a factor applicable to, or which corresponds to the ad.
- 152. The system of claim 130 or 131 wherein at least one demographic and/or psychographic and/or firmographic entity criteria is sourced from one or more of the group consisting of: a questionnaire, survey, profile, query box/field, and criteria query page.
- 153. The system of claim 130 or 131 further comprising storage for storing one or more demographic and/or psychographic and/or firmographic entity criteria.
- 154. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to receive through the network geographic criteria which is associated with, a component of, a factor applicable to, or which corresponds to said ad, entity, user, seeker, or entity criteria.
- 155. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to enable an advertiser to set one or more advertiser notifications.
- 156. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to send and/or receive one or more of the advertiser notifications.
- 157. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to automatically take one or more actions as a result of the advertiser notification(s).
- 158. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to drop the ad once a particular number of clicks on the ad have occurred.
- 159. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to display the ad only during a certain time of day.
- 160. The system of claim 130 or 131 wherein the bid is a variable bid.
- 161. The system of claim 130 or 131 wherein the bid is a variable bid with a bid cap.
- 162. The system of claim 130 or 131 wherein the server(s) and/or processor(s) is/are further configured to enable the receiving and/or paying of an amount for the ad which is less than the amount bid for the ad.

\* \* \* \* \*

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# United States Court of Appeals for the Federal Circuit

Steve Morsa v. Facebook, Inc, 2015-1336

## **CERTIFICATE OF SERVICE**

I, Robyn Cocho, being duly sworn according to law and being over the age of 18, upon my oath depose and say that:

Counsel Press was retained by Bragalone Conroy PC, Attorneys for Appellant to print this document. I am an employee of Counsel Press.

On **April 20, 2015** counsel has authorized me to electronically file the foregoing **Plaintiff-Appellant's Principal Brief** with the Clerk of Court using the CM/ECF System, which will serve via e-mail notice of such filing to all counsel registered as CM/ECF users, including any of the following:

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Paper copies will also be mailed to the above principal counsel at the time paper copies are sent to the Court.

Upon acceptance by the Court of the e-filed document, six paper copies will be filed with the Court, via Federal Express, within the time provided in the Court's rules.

April 20, 2015

/s/ Robyn Cocho
Counsel Press

# **CERTIFICATE OF COMPLIANCE**

This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because this brief contains 10,833 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Fed. Cir. R. 32(b).

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14 point font.

April 20, 2015

/s/ Patrick J. Conroy

Patrick J. Conroy